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NORTH CAROLINA

MEDICAL JOURNAL.

THOMAS F. WOOD, M. D.,
GEO. GILLETT THOMAS, M. D.,

JACKSON & BELL, PUBLISHERS.

SINGLE COPIES, THIRTY CENTS. THREE DOLLARS PER YEAR.

No. 1.] WILMINGTON, JANUARY, 1892. [Vol. XXIX

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JAMES F. MCREE, M. D., Born Nov. 28th. 1791, Died Aug. 9th, 1869.

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Number 1. Wilmington, January, 1892.

Vol. 29.

ORIGINAL COMMUNICATIONS.

TWO LECTURES ON IRITIS.

By J. H. CLAIBORNE, Jr., New York.

(Clinical Lectures, delivered at the Polyclinic Hospital, New York.)

[No. 1.]

GENTLEMEN:—I will talk this morning on a subject which is of particular importance to you, for it is a matter in which ignorance can do much harm and knowledge much good; this subject is

IRITIS.

Before going into the consideration of the subject, it is well for you to enter into the anatomical relations of the eye, otherwise you will not be able to understand the disease or the treatment. You q IRITIS.

will recollect that where the optic nerve comes into the eve-ball, there are two sets of blood-vessels, known as the long and short ciliary arteries; you will remember that they pass into the eye-ball between the choroid and the selera and that they run forward up toward the region of the ciliary body and the iris, and, having arrived there, they form a circular or ring-like anastomesis, which constitutes an outer or greater iritic circle. From that greater circle there pass off numerous small blood-vessels, arteries, which, passing down into the subjacent tissue, form a circle which is known as the lesser iritic circle. This lesser iritic circle is composed of extremely delicate blood-vessels, which lie in the stroma, mixed with other elements. Now, as we know very well, inflammation is accustomed to be intense where there is a large amount of blood, or the elements of blood (there is such a thing as inflammation of the cornea, though there is no blood in the cornea). In addition to these blood-vessels there are numerous nerves, ciliary nerves, that form a delicate net-work through this tissue; there are also numerous muscular fibres, some of which are supposed to be dilating fibres, but this has never been proved; indeed, it is commonly supposed that the human iris not only contains dilating fibres, but it is a question to my mind whether they ever existed. Certain it is that this iris is a most wonderful substance, made up of fine connective tissue, muscular fibres, blood-vessels, nerves and pigment.

We are accustomed to regard the beauty of an eve by the color of its pigment; but allow me to say right here that the color of the iris is not the color of the pigment; the color of the eye is changed by the expression of the face, largely by the lid and also by the iris. The most beautiful eyes are those which are constantly changing color as the expression of the face changes. The pigment which lies in the eye, is placed there for the purpose of obstructing peripheral rays of light; the pupil has been put there by the Creator to allow enough light to enter to give an exact image; when the iris is small and the pupil dilated, the color is more or less changed; nervous persons have pupils that dilate with great rapidity; black eyes are generally small and the pupil is never dilated. So, the color of the eyes is not due to the color of the pigment, for you do have blue pigment, but the pigment is so arranged that a certain phenomena takes place, giving character to the eye, blue, black or brown. This phenomenon is known as IRITIS. 3

"interference." If you dissect a pig's eye, the posterior or uveal surface of the iris can be stripped off with the choroidal pigment. which covers the entire back of the eye, like the back of a photographer's camera. Suppose such a structure as this were to become inflamed, every physiological constituent must necessarily undergo a certain change. Let us take any one of the characteristics I have spoken of; suppose one eye is perfectly clear and the other is inflamed, iritis has been set up, what would be the symptoms or signs of inflammation? The healthy eye is perfectly clear, the other is intensely injected, so the first symptom of iritis is injection; the healthy iris is a clear gray, the other is dull and has a leaden appearance, so the second symptom is modification of color; this is one of the most prominent symptoms; you all know that the muscular system is of such a character that the pupil is constantly contracting and relaxing, so much so that it has been impossible to get the physiological size of the pupil, changing as it does according to the amount of light; but in iritis this action is much modified; the pupil may contract with great rapidity and remain so, but it will not respond to light, so modification of the muscular action is the third symptom. The pupil is nearly always contracted in iritis; it is caught in a condition of contraction; exudation is thrown out, and it is retained in that position; the blood-vessels become engorged and throw out serum and lymph, and sticks to the face of the lens behind it, so that it is impossible for it to move. This lymph becomes dissolved in the anterior chamber, the aqueous humor becomes dirty, and, if you throw oblique light into the eye, this will be recognized at once and the diagnosis made, so we can add dirty anterior chamber to the list of symptoms. On the posterior surface of the cornea you may see little drops or beads, or condensed steam.

Whenever you see around the cornea numerous blood-vessels running over the sclera toward the cornea, like the rays of the sun, you may know for certain that, if there be no iritis there, the deep structures are affected, the deep blood-vessels are involved. There are two layers of blood-vessels, the superficial, which are tortuous, and the deep, which are straight, and of which you take no notice unless the eye is congested; so, when you see a pink zone around the cornea, with straight blood-vessels running toward it, bear in mind that there is an inclination of that eye to have iritis. Con-

4 IRITIS.

junctivitis presents a red ball, a uniformly red ball; in iritis the ball is pink, a redness which is not so intense, and white can be seen between the interstices of the vessels; conjunctivitis is accompanied with profuse discharge, while iritis is never accompanied with great secretion nor with the burning that is complained of in the former disease; there is pain around the eye and down the nose—great pain when you touch the eye ball, and this is another pathognomonic sign. For this reason, it is well to get in the habit of taking the tension of all eyes. The pain in iritis is very severe, and is apt to be much worse at night-time, though the cause of this is unknown. It has been thought that it was due to the supine position, but I have had patients sit up all night and found the pain just as bad; so that I am convinced that it is not due to that.

The etiology of this disease is obscure; we know that it occurs most frequently where there is some constitutional taint, such as syphilis or rheumatism; it also comes from cold. I am not one of those men who attribute everything to syphilis which did not get better under anti-syphilitic treatment; but there are certain species of iritis which are syphilitie, among them is plastic iritis, where much exudation is poured out, but there is also much exudation in rheumatic iritis or sporgy iritis, in which a cloud is seen, like a piece of sponge or cotton, in the anterior chamber; it is sometimes so dense that it hides the lens. That form of iritis in which beads appear on the cornea are nearly always due to rheumatism, so you can exclude syphilis in those cases. It is said that you can always attribute the disease to syphilis when the inflammation of the iris is excessive, but I do not think you can.

I have spoken thus far of acute iritis, but there is such a thing as chronic iritis, which, of course, was once acute, and has become chronic owing to the fact that the adhesions binding the iris have never been broken up; the inflammation subsides, but the adhesions remain; then some cause will set up inflammation again, and the eye will attempt to pull the iris free of these adhesions; this will happen again and again, and is termed recurrent iritis, which is a very unpleasant thing. Rheumatic iritis is very apt to be recurrent

Secondary iritis is induced by extension of inflammation of some other part of the eye, thus there may be chloroido-iritis or kerato-iritis. Iritis is generally primary. Little can be done for a chronic iritis.

There is another form of iritis which is very rarely recognized, i. e., gonorrheal iritis. I do not mean that gonorrheal pus is inserted into the eye, but that the urethral discharge is accompanied by an inflammation of the iris; it differs in character from the syphilitic iritis, in that it is not so severe and that there is less exudation. You will be able to recognize it when you learn that the patient has had a gonorrhea; it is very often associated with rheumatism of the knee and gonorrhea; bear in mind the fact that there is such a thing as gonorrheal rheumatism.

[No. 2.]

TREATMENT OF IRITIS.

GENTLEMEN: -This morning I wish to say something about the treatment of iritis, the subject of which we talked last time. Perhaps you all think you can treat iritis as well as anybody else, but it is one of the most important things in ophthalmology, as the results show. Ophthalmologists are often called in consultation in which the physician has made a diagnosis of conjunctivitis, apparently because the eye was red, and he will be surprised to see that the eye-surgeon will diagnose iritis and adopt a course of treatment entirely different from his. A year ago I was called in to see a case where the diagnosis had been made and the eye treated with boracic acid, simply because the practitioner had heard that boracic acid was good in all diseases of the eye. Do not imagine for a moment that you can treat any disease of the eye without making a careful diagnosis. If you make use of the oblique illumination, and know how to use it, it becomes an easy matter to diagnose iritis. The dull, leaden appearance of the eye, the steamy cornea, injection of straight blood-vessels, running towrrd the iris like the spokes of a wheel towards the hub, the pupil bound down and not responding to light, tenderness on pressure-these are things which you must bear in mind.

Some form of rational treatment must be adopted at once; first, to relieve the pain, then to cause these deep-seated blood-vessels to empty themselves; to clear the cornea and to dilate the pupil and take the pupil away from the lens capsule. Last week I tried to draw for you, in a rough way, the position of the lens behind the pupil, and you will remember that I told you that when this iris

becomes inflamed and thickened lymph is poured out, which binds the iris to the anterior surface of the lens; you will discover this by throwing oblique light into this eye. In view of the fact that the lens is shaped as it is, the iris must lie closer to the lens at the pupillary edge than anywhere else, and in its contracting it sometimes touches on the lens. This lymph, which is extremely sticky and tenacious, will hold the iris against the anterior surface of the lens and a condition results which is known as spurious cataract. Hence, when a surgeon talks about spurious cataract in a paper, do not imagine it is necessarily a permanent thing, for he means that exudation has been poured out and that the anterior surface of the lens, corresponding to the size of the pupil, has been covered up by this exudate, so that no light can enter. But a man with such an eye is just as blind as if a knife had entered his lens.

The adhering of the iris to the lens is the main point to be guarded against, and it can be prevented if the disease is recognized in the beginning, for then the iris will recede and the eye become normal. Whenever you see an eyeball that has those straight sub-conjunctival blood vessels injected you will know that the larger iritic circle is intensely congested; that the smaller bloodvessels that branch off from it are on the point of becoming congested. The larger circle is congested first and is the red flag of danger, from which you must take your cue; then it is only a matter of a few hours when the disease will declare itself. Whenever you see this use a certain remedy; whether it gives discomfort to your patient or not, you know that it will do good. This remedy is atropine.

The sulphate of atropine, which is, as you know, the active principle of belladonna, has marvelous effect in nitis; it paralyses the third nerve, not the entire nerve, but those fibres that supply the pupil and the muscle of accommodation. Now, if atropine were to have a paralysing action on all the fibres of this third nerve a condition would result which is known as ophthalmoplegia externa. It is fortunate, then, that atropine has this selective action upon certain fibres. Atropine also contracts the blood-vessels; they have large muscular coats and the blood is squeezed out into the venous channels of the eye—the eye is put into a state of physiological rest.

Sometimes, after using atropine, the pupil will dilate in a ragged

way. Now, it is necessary to get this eye in a condition in which you can dilate it. Don't imagine that any pupil, when inflamed, can be dilated, for it is at times very difficult. Nor can you use atropine in all cases, for some people complain that it makes the face flush and causes the eyelids to swell. It has been shown that the extract of belladonna leaf is good when atropine cannot be used, and I know surgeons who use the alcoholic solution, but it is very irritating and an aqueous solution is better. Duboisine is another agent that can be used, and is especially good when combined with atropine; cocaine is used also, but is more of an anæsthetic than a mydriatic. All of these remedies seem to possess anæsthetic properties, for patients will often be relieved from pain and photophobia before the remedy has had time to paralyze the muscle of accommodation. Atropine is recognized as the strongest and most certain agent we have to dilate the pupil. I have known general practitioners who recognized the disease with excellent judgment and prescribed atropine, but the strength of the solution was not great enough to do any good. I have known them to prescribe I grain to the ounce, having read that in a book written years ago perhaps. If you use atropine, use at least 4 grains to the ounce, 1 grain to 2 drachms. I have used it even stronger than that-8 grains to the ounce-but am cautious about the number of drops I put in the eye. Occasionally I have used as many as 10 or 15 drops, inside of three or four hours, with the only bad effect of drying the throat somewhat. Of course you must be on your guard when using that strength; keep the patient in your office under observation for some time; do not give him the atropine, telling him to put in a drop every two or three hours, and leave him, for when you go back you may have a case of belladonna raving. This is a matter of the greatest importance. I am accustomed to prescribe a solution of atropine and one of cocaine, the bottles marked No. 1 and No. 2, and I leave directions, after I have tested the patient's ability to stand it, to have a drop of the atropine put in the eye in an hour, and an hour after that a drop of the cocaine, and so on; or else I use 1 grain of atropine in 2 drachms of a 4 per cent. solution of cocaine. Cocaine is of great use, for beside its antiseptic effect, it does away with the sensations of heat which is complained of, and assists the mydriatic action of the atropine. If you have the patient in your office, put in 1 drop of atropine; five minutes later put in a drop of cocaine; five minutes later another drop of atropine, and so on until you have put in six drops of each. Never put in but one drop, for the conjunctival sac will not hold more.

In addition to these remedies, water is of value in iritis. Tell your patient to bathe the eye with hot water—not warm, but as hot as can be borne. Do not use cold water, for it will make the pain worse. Bathe the eye constantly, using a piece of absorbent cotton, or have an assistant ring out pieces of cotton in hot water and apply them to the eye, changing them often; this will give relief and increases the action of the atropine.

In addition to atropine, cocaine and hot water, there is a remedy which is of as much importance as anything, namely, the application of leeches. In clinics you will find that surgeons rarely order leeches, because leeches are hard to get and the patients are unruly, but I do not know a better thing to relieve this inflammation than leeches. I remember a case of syphilitic iritis which came to me; the iris was bound down; I sent the man to a drug store, where leeches were applied, and while they were sucking he fell asleep and did not wake for some hours; it was the first sleeping he had done for four nights.

The manner in which the leeches are applied is very important; do not imagine that you can put them anywhere, though I have known them to be applied way down on the cheek, or up under the hair, and even on the conjunctiva itself. The point of predilection is where the blood-vessels come out of the orbit at the temporomalar formina, just over the edge of the orbit in the temporal fossa, in a line with the outer canthus. By putting the leeches there you take away blood directly from the orbit, it seems to diminish the supply of blood that goes to the eye, and the sensation of fulness and over-distension is relieved at once. It is best to go to the drug store with your patient and apply them yourself, for you cannot be sure that it will be properly done.

There is another remedy, which can be made use of in large cities, but not in the country—the Turkish bath. The system is relaxed by the alternate heat and cold, and the action of atropine is much increased. I have tried this with success and with failure; the case in which I obtained such good results with leeches was first sent to take a Russian bath with no good effect.

So much for local treatment, but nothing is more important than the systemic treatment in iritis. As I told you in the last lecture, the principal causes of iritis are syphilis, rheumatism and gonorrhea. In syphilis the treatment par excellence is the mixed treatment-a prescription something like this: biniodide of mercury 1 grain, iodide of potassium 4 drachms and 4 ounces of water, a teaspoonful to be taken four times a day if the person is robust; should it cause intestinal trouble, it can be taken only three times a day, until the teeth are touched. The proto-iodide is specially good in iritis when it is associated with the secondary symptoms of syphilis, but in the old cases where the symptoms return, the mixed treatment gives the best results. Calomel and bluemass are undoubtedly used, and you can make use of any form of modification of this treatment which you think advisable. Do not imagine, however, that every case of iritis is due to syphilis and that you are going to cure it with mercury. There is such a thing as rhenmatic iritis, and in cases of that kind you must drop anti-syphilities and make use of some simple rheumatic treatment. The best results are obtained from the salveilate of soda, and, in cases where there is so much spongy exudation that nothing can be seen, after a few doses of 10 or 15 grains, great improvement will be noticed. Other things may be as good, but when I mention one or two more remedies it is because I have gotten the best results from them.

All cases of iritis have a limited course. You may modify the pain and save the eye by dilating the pupil in time and giving proper medication, but iritis has a definite history and a definite course, and it will certainly run that course about three or four weeks.

You will meet many cases of iritis in which you cannot dilate the pupil, and, at the end of three or four weeks, the pupil remains bound down; an eye like that is of little use to its owner; he is going to have recurrent iritis all his life, especially if he has had syphilis or rheumatism.

I wish to mention one other point with reference to the pain in iritis. These patients suffer intensely at night, as I have stated, and I think it is wrong for a surgeon to stand by and do nothing to relieve the pain. I give hypodermic morphine if necessary, but some patients will sleep well after 20 or 30 grains of antipyrin. An eye will get better at once if you put the patient to sleep, instead of letting him get worn out with pain.

JAMES FERGUS MCREE, M.D.

(A Biographical Sketch, with Portrait.)

By THOMAS F. WOOD, Wilmington, N. C.

Dr. James Fergus McRee was born at "Lilliput," his father's plantation, fourteen miles below Wilmington, November 18th, 1794, and died of quinsy in the latter town on the 9th August, 1869.

He was one of the four sons of Major Griffith J. McRee, an officer in the American army during the Revolutionary War. His mother was Ann Fergus, the daughter of Dr. John Fergus, a native of North Carolina, of Scotch extraction, a graduate of the Edinburgh Medical College, and afterwards a surgeon in Gen. Braddock's army.

Major Griffith J. McRee was born in Bladen county, North Carolina, and was the son of Samuel McRee, an Irish emigrant from county Down, Ireland. He was a Major of cavalry in the Continental line, and when the war of 1776 ended he was a Colonel by brevet. He was in the Southern campaigns with Green and Howe and others, receiving the regular appointment of Captain of artillery 2d June, 1794, resigning in 1798 to accept the appointment of Collector of Revenue for the district of Wilmington. He died in Smithville (now Southport) 30th October, 1801.

Dr. McRee's brothers were Col. William McRee, a distinguished engineer officer in the United States Army,* who was the eldest.

^{*}Colonel William McRee, born in Wilmington 13th December, 1787, was the son of G. J. McRee and Ann Fergus. His father (and so, of course, Dr. James F McRee's) was the child of an Irish emigrant, was a native of South Carolina, and removed in early youth to North Carolina. In 1803 he was appointed by Colonel Williams, Chief of Engineers, to West Point, he waiting for the lad to get his outfit, and carried him with him to West Point. His warrant as a Cadet in Regiment of Artillerists at West Point dates April 14, 1803, and Cadet in Corps of Engineers 1805. In 1807 he had command of the Engineer Department at Charleston, South Carolina, and in 1808 was made Captain. At the commencement of the War of 1812 he was made Major of Engineers. In 1818 he served on the northern frontier with Hampton and Izard. In 1814 he distinguished himself in an action near Falls of Niagara under command of General Jacob Brown, for which he was breveted Lieutenant Colonel. At the battle of Fort Erie he served with further distinction and was

Dr. Griffith J. McRee, an older brother, who entered the medical profession late in life (1824 or 1825), died in February, 1831, and was buried at "Lilliput," the paternal estate. Samuel McRee, born in 1801, the youngest brother, was a Captain in the United States Army, who died in St. Louis, Missouri, in 1849.

Dr. McRee, the subject of our sketch, was at the early age of 15 or 16 placed in the office of Dr. Nathaniel Hill. His opportunities for academic education were very small, his father dying when he was only 7 years old, but according to the custom of the day he went through a regular service in the office of a physician, who himself had served a regular apprenticeship under a Scotch apothecary near Glasgow, previous to entering upon his medical course at Edinburgh. It was during the time of this training in the doctor's shop (for in those days it was literally a drug shop and laboratory in a far more complete sense than the drug stores of to-day) that he pursued the study of Latin under the older student's in the office, and in that language he became quite proficient.

While the War of 1812 was going on, although Wilmington was a port into which the American privateersmen brought their captured prizes, and merchandize of various sorts was obtainable at that point, some of it being purchased and sent as far north as Philadelphia by wagons, there was at times a great dearth in some of the then indispensable drugs, so that young McRee found himself in these early student days assisting his preceptor in making calomel after the old process from the metal, a degree of the chemical art which we doubt if the best apothecary of to-day from Philadelphia to New Orleans would be skilled enough to undertake with confidence. Quinine did not come into use until many years later, and "the bark" and all of its various preparations, of which Huxham's tincture was the most elegant, was not yet a rival of the febrifuge simples of indigenous growth.

So early as December 9, 1800*, the Medical Society of North

brevered, after the campaign, November 30, 1814, Colonel. He served in the battles of Chippewa, Lundy's Lane, Fort Erie and New Orleans. After the war, April 15, 1815, he was sent to Europe to examine military schools, work-hops, canals, arsenals, fortifications, etc., and to purchase books, maps and instruments.

See Historical Note by Dr. Will. George Thomas, p. 75 Transactions Medical Society of North Carolina, Raleigh, May 1854. Carolina offered premiums for the cultivation of the following drugs: "For the largest quantity of not less than 10 pounds of Fox-glove, ten dollars; for the largest quantity not less than 5 pounds of opinm, twenty-five dollars (to be exhibited at the next meeting of the Society), for the largest quantity not less than 10 pounds of rhubarb, exhibited to the Society in 4 years, thirty dollars; for the largest quantity of castor-oil not less than 5 gallons, to be obtained without heat, five dollars; and for the largest quantity not less than 50 pounds of senna, ten dollars."

So ran the patriotic sentiment of the profession of that day, that they must not buy or use imported drugs, but bend their energies to supplying their own needs. The list was a small one, to be sure. but not even burning patriotism could cause the most needed plants to grow in a soil and climate not suited to them. In the north D. Jacob Bigelow had led the profession in the study of indigenous medicines, and sixteen years after the North Carolina Society had made an effort to grow drugs, he had published his magnificent work entitled American Botany (1817). In (1817), the same year, Dr. W. P. C. Barton, professor of botany in the University of Pennsylvania, published "A Vegetable Materia Medica of the United States,"f" and in the preface to his Flora of North America, 1821, he says: "That spirit of independence which forms the basis of character in a true American, has discovered its determination to emancipate itself from a scientific subjugation to foreign countries." This emancipation was to be largely in the discovery of indigenous plants possessing medicinal qualities.

^{*}It was not done at the next meeting. (See above vol. of Trans)

[†]This work, now quite scarce, appeared originally in six parts in board covers, each part containing colored drawings of ten plants, which were engraved and colored from original drawings made principally by the author. The drawing and engraving, and probably the printing, were done in France, although bearing a Boston publisher's name on the title page. 4 "Barton's Vegetable Materia" has not quite the finish of its Boston rival, but has the appearance of being a production of the American press, having the imprint of M. Carey & Son, Philadelphia, the predecessor of the present old house of Lea Brothers & Co. Dr Barton's work was quite a rival of Bigelow's, and both were great undertakings for their day The explorations of Louis & Clark, he says in his preface, had "led to high expectations in every branch of science" Dr. Shoepf, who came to America with the German troops

The medical student of the early part of the century, when he was filling the measure of his struggle towards the highest grade in professional life, made medical botany his serious study, as by his expertness in detecting medicinal plants came the replenishing of his stock of drugs. To this branch young McRee assiduously applied himself, and in the admirable library* which he collected, only a fragment of which existed when it came under the eye of the writer, there was hardly a classical work of the earlier naturalists of which we did not find some volume.

When he was ready to attend lectures he had already made large acquisitions of knowledge by his apprenticeship of four years or more, which is indicated by the fact that he graduated at the New York Medical College, now the College of Physicians and Surgeons, in 1814, after one course of lectures.† Dr. John H. Hill,‡ a retired physician and a revered Honorary Member of the Medical Society of North Carolina, says that he and his friend Dr. Waters went to attend lectures in New York in 1829-'30; they took Dr. McRee's lecture notes with them, and they found the notes on Dr Hosack's lectures were nearly verbatim, as then delivered. Although his

during the Revolutionary War, published the first work on American medical botany, entitled "Materia Medica Americana potissimu n Requi Vegetabilis," and it seems to have been through this stimulus that the contribution of the elder Dr. Barton ("Collections for Essay towards a Materia Medica of the United States, 1798), was written Succeeding this "Coxe's American Dispensatory," "Thatcher's Dispensatory," and the "Pharmacopæia of the Massachusett's Medical Society," as Barton states, were all the accessible works on indigenous plants. He earnestly solicits information from country practitioners of medicine residing in different parts of the United States to send him their observations upon medicinal plants.

*His library suffered very much by neglect even before his death—As intimated above, he brought into his collection the choicest volumes, the natural sciences bearing a large proportion to medicine—It was placed at the disposal of Dr. E. A. Anderson after the civil war, and he presented all the desirable volumes to the Surgeon General's Library.

†The American Medical and Philosophical Register says that James Fergus McRee graduated 5th in the list at a commencement held Tuesday, May 3d, 1814; he presented a thesis on "Remittent Fever of Carolna"

the descreto make our acknowledgment to Dr. John H. Hill, now of Goldsborough, for the kind assistance he has given us in the preparation of this sketch.

acquirements enabled him to graduate in one session, he returned to New York and attended another course.

Dr. McRee entered upon the practice of his profession in his native town in 1814, succeeding his preceptor, Dr. Nat. Hill, who had retired, leaving his practice to Dr. James Henderson, his son-in-law, and his young friend McRee. Dr. Henderson removed to Raleigh, thereby giving Dr. McRee the leading practice in the town.

He was married at Rocky Run, near Wilmington, to a niece of Dr. Nat. Hill, November 14th, 1816, and had two children—Dr. Griffith J. McRee, author of the "Life and Correspondence of James Iredell," and Dr. James F. McRee, Jr., for years a successful practitioner in Wilmington, and a surgeon in the Confederate Army.

THE YELLOW FEVER OF 1821.*

Dr. McRee was 27 years of age when he faced the epidemic of yellow fever of 1821. This was a very severe visitation. The period of incubation of this epidemic was from the 12th of July

^{*}Wil nington in 1821 was a small village of 2,500 inhabitants, doing a considerable commerce with the West Indies. Eagles' Island, opposite the town, contains many thousand acres of swamp land, and was then part under cultivation in rice by the irrigation method, and from North east to Southwest the town was surrounded by rice-fields [Letter of Dr. John Hill in the "American Medical Recorder," 1821-"Yellow Fever as it prevailed in Wilmington in 1821] "The parts of the town adjacent to the river are but a few feet elevated above its surface. The wharves are made ground, badly constructed, and are always overflowed by storms and frequently by high tides" There was in the vicinity of the public square an unfinished wharf, partly filled with decaying vegetable matter. The docks were notoriously filthy, and the cellars so low and damp as to require bailing daily in wet seasons. The commercial part of the business of the town being conducted mostly by strangers, "who desert us during the sickly season," their premises being locked up, they were rendered putrid by the decaying "potatoes and other vegetable substances left there " Such had been the condition of things for years. The brig "John London" came in from Havana 25th July, 1821, and following upon it was the appearance of yellow fever. Dr John Hill, in his article to the "American Medical Recorder," contends for the local origin of the fever (and its now contagiousness), apparently believing it to be an intensified form of bilious fever. One of his colleagues had asserted that he had attended two cases of yellow fever

to the 9th of August. His sister, Mrs. Morrison, died of the disease at Smithville.

Dr. John Hill says it did not have respect to age, sex or color. Dr. McRee's account of it to Dr. John H. Hill was that there were many "walking cases" A man would feel as if he had recovered entirely of the disease, get up, put on his clothes, walk*down street as though nothing was the matter with him; meet his friends and be congratulated on his recovery, return home, and in a short time expire. One case he related of Mr. Charles Wright, a prominent lawyer of that time, who had avoided the exposure of the contagion by residing on the Sound (8 miles from Wilmington). After the epidemic had ceased he came up to town, on his way to Duplin county. Dr. McRee met him and cautioned him by no means to go into his office, as his servant had been sick there and recovered, since which the office had been closed without ventilation. He remarked that his papers were in the office and that he must get them as it would be useless for him to go to court without them.

before the "John London" came in. The story of the arrival of the vessel atter twelve day's passage from Hayana with a sick mate on board who had fever and jaundice (to the latter disease he declared to the health officer he was subject!); the only other sick man was one who, in a fit of mental derangement owing to the voyage, jumped overboard and was drowned; the bedding of the captain was taken to his house, into the thickest settled part of the town, and no sickness occurred in his family; "many of the most respectable citizens partook of a collation on board the "John London," and were seated for hours in the cabin in unsuspecting "security, passing the fiery ordeal unharmed"; it was some time in August when the disease began to be epidemic Here we have the story of yellow fever which was actually repeated forty-one years after. The treatment of that day was just as it remained for fifty years afterward; following Dr Johnson [Dr. James Johnson, the author of "The Influence of Tropical Climates on European Constitutions," etc., etc.], calomel was given in 20 gr. doses with 4 grain of opium, and, not waiting for the action of the caloniel, which was retarded by the opium, an enema was given. The immediate object after the bowels were evacuated was to "establish a full mercurial action by calomel and the ointment, Dr. Hill adding, emphatically, that he ever found this treatment "no fraud upon the public." [It is worth noting that Dr. Hill gave with satisfaction carbon" (pulverized charcoal), "rubbed up," 1 to 1 teaspoonful in an ounce of lime-water, and repeated it every hour, to keep the stomach quiet.]

He did so, went to court, and, after being there a few days, was taken sick with symptoms of the fever, started home, but got no further South than Washington, from which place he sent for Dr. McRee, dying before he could get to him. The friend who roomed with him and nursed him at court and antil he died, entirely escaped the disease. This incident fairly identifies the nature of the disease as the same which visited us in 1862. The physicians who practiced in Wilmington at that date were Dr. DeRosset, the elder, and Dr. John Hill, who was afterwards President of the Bank of Cape Fear. When the epidemic of 1862 visited Wilmington Dr. McRee was the only physician* who had any experience in it, and he was not slow to recognize the fever, although he had then been sixteen years out of practice. He nursed the lamented Dr. Dickson during his fatal attack of the fever.

Dr. McRee was magistrate of police (equivalent to Mayor) for the town of Wilmington from about 1827 to 1831, a period covering the time of the so-called "negro insurrection," commanding at the time a troop of cavalry that did effective patrol duty. When Wilmington was captured by the Federal Army (1865) the older negroes who remembered his day of municipal rule, plied the ears of their willing listeners, the officials of the army of occupation, with bitter tales of their wrongs, which caused them to treat him with gross indignity.

AS A BOTANIST.

When Mr. Moses A. Curtis came to Wilmington from Massachusetts, in October, 1830, as tutor to Governor Dudley, he found Dr. McRee a most diligent student of botany. One of his old friends writes me that, "Amidst all his labors in his profession, he devoted a great deal of his time to botany." His practice was largely in the country, and the young doctor could ride along the solitary roads for miles, greeted at nearly every step with the happy faces of old and new floral friends. From savanna to sandhill, from river swamp to causeway, in the flaring heat of an August sun or the nipping frosts of January, he caught the glowing colors of the liatris, the coreopsis, the solidago, the gerardia, and was enlivened by the busy hum of the insects among the sarracenias and droseras,

^{*}It was stated differently, but erroneously, in the biography of Dr. Dickson, in the August number.

nor had he far to look in the sheltered nook of a bog for a brave spiranthes, with its spiral necklace of pearls, or an aster, with its radiant purple, lifting their heads amid the desolation of winter. It was in such a school that he trained his perception, heightened his power of diagnosis, exercised his memory, and meditated upon the wonders of God's providence and creation. A lost art now, because of the necessities of other studies and diversions, but one which at this day added a galaxy of distinguished names to science and likewise added permanent material to botanical knowledge,*

Dr. McRee retired from practice first in 1834-'35, and settled upon a plantation at Rocky Point (now in Pender county), about fifteen miles from Wilmington. He was a successful planter, finding it congenial with his tastes, and affording him opportunity to indulge his passion for botanical exploration. When the Rev. M. A. Curtis published his "Catalogue of Plants Growing Spontaneously Around Wilmington," in 1832, he made his acknowledgment to him for his assistance, and all through the list we see rare plants inserted upon his authority, most of them found at Rocky Point. Subsequently he added 30 or 40 new plants to Curtis' list.

He conducted a considerable botanical correspondence and exchange of plants with other botanists, and kept his own herbarium renewed with fresh specimens up to later days. In 1837 he made a journey to Southwest Georgia, stopping over at Augusta to pay his respects to Dr. Ray, a botanical correspondent he had never seen, and the meeting between the two friends was of that cordial sort that only the kinship of botany can inspire.

Shortly after he returned from Georgia he resumed the practice of medicine in Wilmington, continuing in it until 1846. He purchased the old estate of the Revolutionary patriot, Cornelius Harnett, from John R. London. Here, amid the beautiful floral family which he gathered around him, he expected to end his days. Every ornamental tree or shrub he came across in his botanizing tramps he added to his collection, until his broad acres imitated

^{*}His name is only signalized in botany by the naming of a species (a variety, according to Sereno Watson) of Galactia Macreei, incorrectly spelt, by the author quoted, Macreei.

the botanical gardens of Michaux, near Charleston and Bartram,

He was a successful horticulturist, raising upon his farm at Hilton a variety of kitchen products not found at that day (1857) in our markets—tariers, rhubarb, canteloupes, burr-artichokes (cynara scolymus), and others—stimulating others in the art of kitchen gardening by his example.

It was as a diagnostician that Dr. McRee excelled, and in the consciousness of his ability his manner was that of the autocrat. This trait extended into many of the relations of life. His pride was that of conscious power, and the all-but unlimited scope of his authority over his large household and plantation servants, and the ready admission of his superior learning by his confréres, tended to confirm him in it. The spirit of the faculty of that day was that of imperiousness and dogmatic assertion, and in his cwn community he was an "authority" to be feared by opponent, to be warmly welcomed by friend.

As a surgeon, he was bold and original, at a period when the amputation of a limb or couching a cataract was considered the test of surgical ability. As early as 1840, Dr. E. A. Anderson relates, he performed a plastic operation for the restoration of a perineum in the person of one of his negro servants, who was suffering from complete procidentia uteri.

His habit of study was a part of his existence, and after he had attained the seventies he was a diligent reader of the standard

^{*}The ancient mansion of Cornelius Harnett overlooks the banks of the Northeast Cape Fear River. It comprised a large tract of well wooded upland, with a small body of swamp rice-land skirting it to the North and East. It was here that Harnett lived, and where, during Dr. McRee's day, an old-fashioned Southern hospitality abounded was sold in 1867 to Mr. Grafflin, of Baltimore. Since then the proud acres are scarred by an ugly railroad cut, an iron bridge crossing the river at this point, and the pumping station and stand-pipe of the Clarendon Water Works denoting the changed spirit of the times The quaint old house is at the mercy of negro tenants, and in a few years all will be ruins It was under the hill, only a few yards from this house, that Mr. (anby, of Wilmington, Delaware, found a specimen of true Maiden's Hair Fern, Adiantum Capillus-Veneris, which had escaped the keen eyes of both Curt's and McRee. What would the old botanist have said had he known of the presence of such a treasure so close under his windows!

authors in medicine. Only a week or so before he died he was enjoying the classical work of "Pareira on Materia Medica and Therapentics.

An old copy of the Cape Fear Recorder states that he was elected a vestryman in St. James' church February 7th, 1827. His seat was occupied in church with such regularity that the minister would have been as much missed as he. As the shades of old age gathered around him he lost much of his austerity of manner, and took special pleasure in aiding the young students of the profession. His readiness in his latter days in botanical diagnosis was the admiration of all who sought information from him.

His continued interest in the profession is shown by the fact that, as late as 1868, he was President of the New Hanover County Medical Association.

The following memorial of his life-work is taken from the records of this Association:

"Died, suddenly, in the city of Wilmington, on the morning of the 9th of August, 1869, Dr. James F. McRee, Sr., in the 75th year of his age.

"In this brief notice we have to record the unexpected death of our oldest and most prominent physician. Dr. McRee was in every sense a veteran in the service. For more than 50 years he wore the harness of the physician, and as such treated four generations—dying loved and honored by them all. He outlived the venerable DeRossett, the Nestor of the profession, who carried us back to the days of Cornwallis and the Revolution of 1776. He was a contemporary of the lamented Dickson, a pupil of Dr. Nathaniel Hill, the finished scholar and high-toned gentleman of the old school. He lived to see them all sleep the last sleep of the just, and has now gone to join the endless number of those whose dying moments his gentle hand and kind heart led through the dark valley of death.

"Dr. McRee was a man of more than ordinary attainments—a finished classical scholar, he read Latin and French with as much case as English—an accomplished chemist, a bold, daring and skillful surgeon, unrivalled in his diagnosis and prognosis—he became the most popular and successful practitioner on the 'Cape Fear.'

"In the department of botany the Doctor excelled-that branch

of our profession so much neglected. Loving and cultivating flowers with the gentle and refined taste of a woman, his residence in our city was one gay parterre of rare native and foreign plants. In his younger and palmier days, elegant and refined taste marked his beautiful garden, with its endless variety of roses, jessamines, lilies and magnolias, while a large and spacious hot-house was crowded with rare and gorgeous tropical plants.

"With the indigenous 'Materia Medica,' the Doctor was perfectly familiar, and was authority on all disputed points of botany, and was referred to on every hand to determine the name, class and properties of any unknown plants in the Cape Fear region, many of which he used successfully in his practice. Always courteous and considerate in his deportment to his fellow-physicians, he won their esteem and affection. A strong supporter of the Medical Society, he filled the honored place of President for some time, and even when the infirmities of years put an end to the active duties of his profession; his venerable form encouraged by his presence the debates and discussions of the younger members.

"No time-server or trickster was he;
No truckler to the dominant powers that be."

"In the great contest through which our State has just passed, his heart was with his own people. He lived and died true to the South, the land of his birth. To the day of his death he took an active interest in the profession he so long served. Fond of medical literature, he read with eagerness all the new journals, and loved to discuss medical topics with his friends. A perfect mind in a failing body, his grand intellect was unclouded to the last. Suddenly, without warning, without pain, he passed from life to death. But, not unprepared, his house was in perfect order. He who had looked unblenchingly upon death for years, feared it not now, for he died the death of the righteous. A noble Christian gentleman, a kind-hearted, benevolent man, a tender, skillful physician, the tears and wails of mothers and orphans follow him to his lonely grave, where sleep peacefully the bodies of his loved ones, who preceded him but a few years ago."

"Mark the honest man and behold the upright, for his end is peace."

REPORT OF A CASE OF INTRA-OCULAR DISEASE IN A CHILD—DOUBTFUL DIAGNOSIS—RESULT OF MI-CROSCOPICAL EXAMINATION—THE LESSON TO BE DRAWN.

By K. P. BATTLE, M.D., Raleigh, N. C.

(Read before the Raleigh Academy of Medicine, December 16, '91.)

The following case from the practice of Drs. Lewis & Battle will prove, it is hoped, of practical as well as scientific interest:

On May 22 a boy of twenty-one months was brought from a distance by the mother for treatment of one of his eyes. The anterior chamber was filled with yellowish white pus, concealing the pupil and iris completely and giving a singular appearance to the eye. The cornea seemed to be clear, the conjunctiva was but little congested and the tension was normal. There was nothing else noticeable about it. The child did not seem to be in much pain. The only history that could be got from the mother was that she had for some time noticed a white spot in the eve, and that she had been told it was a cataract; that the child had never had any illness till two months ago, when it had whooping-cough, and then the eye first became red; that a week ago it had become much redder; and that two days ago the pus had begun to collect in the front of the eye (anterior chamber). The diagnosis of suppurative choroiditis was made, though the absence of many symptoms, chiefly great pain, redness and swelling of the lids, and chemosis, showed that it was a very unusual case. It was recognized that the case was not yet fully understood. There was no history of injury or previous disease to account for a suppurative choroiditis-vet there was the eve apparently full of pus, and with no corneal disease and no iritis. Time would show more, and it did.

The anterior chamber was tapped, under chloroform, and an astonishing amount of first watery and then bloody pus escapes, much of it from beyond the pupil. This remained filled with a film of pus and blood, which entirely obscured the lens, so that little was learned of the condition of things behind the iris. The cornea was shown to be entirely clear and the iris appeared normal, with pupil dilated. The child became entirely comfortable, the

wound closed and he was taken home. He was brought back in five weeks, and it was now still more evident that it was not a case of uncomplicated suppuration of the choroid. Instead of going on to shrinking, the tension was plus, there was a decided bulging of the sclero-corneal junction at the site of the former puncture, and the globe was somewhat prominent. The child had lost flesh, but had not suffered severe pain. There was again pus in the anterior chamber, not great in amount, but so distributed over the pupil that the lens was hidden as before. Paracentesis was again done, and this time the pupil was left clear. By oblique illumination with a lens it was shown that the crystalline was really transparent, and that the apparent opacity seen by the mother previous to the collection of pus in the anterior chamber, was due to a whitish vellow reflex from behind the lens. This was strongly suggestive of the cancerous retinal tumor which occurs in young childrenglioma. The differential diagnosis, however, between this disease and internal suppuration from another cause, was not vet definitely made, but it was advised that enucleation be done without delay. The father was summoned from a distant city, and was seen by us for the first time. He gave more intelligent information than we had been able to get before, saying that he noticed for several months a peculiar light from the eye in certain positions, reminding him at times of the shining of a cat's eyes. This important bit of information made it probable that glioma was the heart of the trouble. This peculiar appearance, and another giving the impression, when the pupil is looked into, that the bottom of the eye can be seen (yellowish reflex), are apt to be mentioned by parents, and are almost pathognomic of intra-ocular tumor.

Enucleation was accordingly done, the optic nerve being cut as far back as possible in the hope of removing all the diseased tissue. The parents were warned, however, that the disease might return. When the eye was examined it was found that there was no rupture, that the lens was transparent, that there was a tumor measuring about one-fourth by three-eighths of an inch, and that the rest of the vitreous chamber was filled with a mass resembling in appearance lung tissue that had undergone caseous degeneration, and suggesting the rare disease tuberculosis of the eye. The appearance of the whole was so peculiar that we decided to get the authoritative opinion of Dr. Charles Heitzmann, of 39 West 45th

street, New York, as to the nature of the growth. In his report he says: "The eyeball has been halved and a tumor found occupying the vitreous chamber, starting from the choroid, invading the optic papilla and pushing forward a part of the ciliary body" "The tumor is a small round celled or lympho sarcoma of the choroid, without pigment clusters, of considerable malignity, and not a glio-sarcoma of the retina. Glio-sarcoma (glioma) is composed of elements with large nuclei and invariably starts from the retina. In your case, on the contrary, the tumor was made up of elements resembling lymph corpuscles, and such tumors invariably start from the choroid. This fact certainly adds to the interest of the case, which I also would consider worthy of publication." "There is danger of a recurrence of the tumor in the eye-socket, since the sheaths of the optic nerve are already affected by the sarcomatous growth."

Choroid sarcoma in children is a very rare disease. According to Berry's statistics, among 181,853 eye patients there were only 82 cases of sarcoma for all ages, or a proportion of 1 to 2,218. From other sources it is found that only about 4 per cent. of all cases occur in children under 10, so that the proportion of sarcoma of the choroid in these children to the whole number of eye diseases may be said to be about 1 in 56,000. For children under 2 years the proportion would be far less. Glioma is not a common disease, but it always occurs in children, never in adults, and—from Berry's statistics again—I calculate that as between glioma and sarcoma in patients under 10 an intra-ocular tumor is more likely to be the former in the proportion of about 30 to 1.

The subsequent history of the case may be soon told. The growth returned and developed with great rapipity. The extremely small chance of saving life by emptying the orbit was explained to the parents and further operation was declined. The child died in a few months.

The practical lesson to be drawn from this case and from others of intra-ocular tumor that have occurred in our practice is the vital importance of early diagnosis. As is generally the case, the child in question was not seen by a physician till too late. The prognosis is not good at best, and the only chance for saving life is enucleation in the first stage of the disease, while the malignant tissue is still confined to the eye and within reach. The diagnosis at this

time can be made with certainty with the ophthalmoscope alone. Any peculiar appearance about the pupil of a child's eye should be the signal for calling in a physician, and if he finds any reason to suspect intra-ocular tumor, and is unable to use the ophthalmoscope satisfactorily, the child should be sent at once to an oculist.

PROF. HARE says that for fainting, as a rapidly acting stimulant, give alcohol, hot and concentrated. The hot alcohol acts much more quickly than cold, because the cold alcohol, before it could be absorbed, must be heated up to the temperature of the body.—

College and Clinical Record.

THE A. C. E. MIXTURE.-I began using the A. C. E. mixture within a year or two after its first recommendation, and I have used it ever since, except in obstetrical practice and for very young children. I have used it for all sorts of patients; for all kinds of operations, minor and major. I recognize fully how insignificant is any individual experience as to anæsthetics, except under very exceptional circumstances, but personal experience always speaks with a loud voice to the person who makes it, and so I may be pardoned if I have acquired strong convictions of the practical advantages and the safety of this mixture. It is to be regretted, of course, that to the three deaths published the number of administrations cannot be added, but this is impossible. The mixture is "largely used in England," according to Buxton. The Lancet speaks of "extensive experience" having demonstrated its efficiency and its far greater safety as compared with chloroform. Adding to these statements the fact of a very considerable use of the mixture in this country, and it is certainly safe to conclude that there has been such an experience with it that a rate of nortality at all approaching to that of chloroform must already have become apparent. I fully believe it to be as safe an anæsthetic as any, and one by which the dangers of chloroform and the inconveniences of ether are alike avoided .- Dr. J C. Reeves, in Kansas Med Jour.

SELECTED PAPERS.

SPONTANEOUS RECOVERY IN ACUTE ARSENICAL POISONING.

By HAROLD N. MOYER, M.D.

(Read before the Medico-Legal Society'of Chicago, October 3, '91.)

Almost every poisonous substance is characterized by some fairly pathognomonic symptoms with the exception of arsenic. It belongs to the class of intestinal irritants, the symptoms of which may be closely imitated by any simple inflammation of these parts. We lack the characteristic symptoms presented by opium, belladonna, or strychnia, so that the diagnosis of arsenical poisoning is difficult or impossible without the aid of a chemical analysis. The symptoms and pathological appearances in acute arsenical poisoning are fairly constant, and yet there is an occasional case in which there is such a wide divergence from the typical picture that there is great liability to error. With these uncertainties clearly before us, we should be very careful in advancing dogmatic opinions.

The average fatal dose of arsenic is well known, but the literature of medicine contains many cases where spontaneous recovery has taken place after the ingestion of a quantity many times greater than a dose that commonly proves fatal. It is apparent that the factors governing these cases are exceedingly various: The resistance of the patient may be greater than usual; a dose; granting that it is all absorbed, may be eliminated that in other cases would prove fatal. Again, the rate of absorption may vary. If the arsenical preparation is relatively insoluble, it may be so long in entering the circulation that the greater portion is either vomited or passed off by the bowels in consequence of the violent peristalsis produced by the drug. As a matter of fact, it is only exceptionally that recovery takes place when these violent symptoms are present. Recovery has, however, been noted after the taking of enormous quantities. Tidy refers most of these cases to that class in which the poison is taken upon a full stomach, as a consequence the great bulk of the drug is rejected with the food in the first efforts at vomiting. It is probable that this is the explanation in most of the cases where spontaneous recovery has taken place after exceptionally large doses. It would be hazardous to deny the possibility of spontaneous recovery even where the arsenic has been administered upon an empty stomach, but we may at least say that it is highly improbable. Any one who has ever examined a stomach containing a considerable quantity of arsenic must have noticed the closeness with which the powder adheres to the mucous lining of the organ. The healthy empty stomach always contains a small quantity of mucus, and this serves to glue the powder to the stomach walls so that with violent vomiting it is gotten rid of with difficulty or not at all.

The following case is one of peculiar interest, and is, so far as I know, the first time the question of spontaneous recovery from arsenic has been directly raised in a court of law.

The facts are briefly as follows A man was charged with the attempted murder of his child, the motive alleged being a desire to inherit considerable property belonging to the latter. The testimony brought out at the trial showed that the child was three and one-half years of age, and that it had always been of delicate health. The night preceding the alleged poisoning the child was taken vomiting shortly after eating a hearty supper. A physician was called in and made a diagnosis of dyspensia and bronchitis. The boy vomited once or twice during the night. At fifteen or thirty minutes after six the following morning the father gave him a drink of water in which it was supposed he had placed the poison. At fifteen minutes after seven a woman who had charge of the boy came into the room to dress him. He then complained of feeling ill, and began to vomit. The nurse noticed that the tongue was covered with a thick green coat; the vomited matter was also mixed with a greenish substance that stained the towel upon which it was caught. A subsequent examination of these cloths showed the greenish matter to be Paris green, the quantity recovered amounting in all to about 2 grains. (Regarding the quantity of Paris green there is a discrepancy between the testimony of the physicians who examined the towels and the chemist who made the tests. The former say that at least one-half teaspoonful of Paris green would be required to produce the amount of staining which they saw. We may disregard this, however, as the smallest quantity stated, 2 grains, is amply sufficient to cause death in a child three and one-half years old.) A servant also noted and testified that the child vomited a greenish substance. As soon as the vomiting began a physician was summoned, who reached the house at 8:15 a.m. On the strength of the statements made to him he prescribed an antidote and an emetic, the latter acting freely. This physician refused on the stand to state that he believed the symptoms were due to arsenical poisoning, as he thought they were too mild. A second physician, who saw the child at 10:30 the same morning, also refused to state that in his opinion the illness was caused by arsenical poisoning. After the effects of the emetics passed off there was no special disturbance of the child's health, no vomiting, purging, inflammation, or prostration.

Certain facts in the above account show that this case is one that must be classed among the spontaneous recoveries, granting that a fatal dose of arsenic had been administered as alleged. It must also be placed among the unusual ones, as the poison was given on an empty stomach. At least three-fourths of an hour elapsed from the latest time when the poison could possibly have been administered before the child began to vomit, then he was given some milk, and he vomited again. One hour later a physician arrived and administered an emetic, but at this time no greenish matters were discharged.

The question naturally presents itself, and it was one upon which we were asked for an opinion, "Was the Paris green administered as alleged?" If we assume that it was given, then we affirm the possibility of recovery upon an empty stomach and without the use of an antidote or emetic. Granting this poisibility, the additional fact presents itself in this case that the child was not ill after this severe dose of arssnic. Assuming that the vomiting was caused by the poison, sufficient must have been absorbed to cause marked irritation of the stomach. Is this possible in view of the fact that there was no purging, inflammation, or prostration three hours after the administration?

Beek mentions a case of spontaneous recovery after Paris-green poisoning in a young boy. Recovery took place only after prolonged illness with severe prostration. It is a general experience that recovery after acute arsenical poisoning, if sufficient time has elapsed for vomiting to have occurred from action of the drug, is

exceedingly slow. The patient is often prostrated for days, and sometimes death takes place long after the administration of the fatal dose.

In view of the very great uncertainty that surrounds the subject of acute arsenical poisoning, we can hardly deny that arsenic was administered in this case, and yet a careful consideration of all the facts throws at least a reasonable doubt upon the testimony. An opinion was accordingly given, that while the facts as brought out in the testimony were not inherently impossible, they were in a high degree exceptional. A very ingenious explanation was offered by one of the medical witnesses. He would account for the spontaneous recovery on the theory that, as the child was suffering from bronchitis, it must have swallowed a considerable quantity of mucus during the night. This he thought would act in much the same way as a quantity of food in delaying absorption of the poison.—American Practitioner and News.

THE BACILLUS OF TYPHOID FEVER; ITS OCCURRENCE AND SIGNIFICANCE.

By J. A. JEFFRIES, M.D.

In 1882 Eberth announced that certain groups or colonies of short bacilli could be found in the Peyer's patchers, lymph glands of the mesentery, spleen and other organs of those dead of typhoid fever. Meyer reported shortly after on the subject, and added much weight by showing that such groups of bacteria existed in nearly all cases of typhoid fever. This was before the general use of aniline dyes and solid culture media.

Next Gaffkey showed that these groups of bacteria could be stained by long immersion of sections in solutions of methyline blue and washing in acidulated water. He also showed that the plant could easily be grown at room temperature, and that the cultures were quite different from any known at that time. The plant grew as a bacillus with rounded ends, was endowed with the power of motion, and apparently formed spores. Gelatine was never dissolved; the deeper parts of the shaft were beaded and slightly

brown in color. The growth on potato was regarded as a diagnostic character, the peculiarity being extensive growth, as shown by the microscope, yet nothing to be seen by the naked eye except a slight shimmer or difference in texture when looked at in a favorable light.

Koch and others soon demonstrated not only that the bacillus occurred regularly in all active cases of typhoid, but also that it could not be found in those dead of other diseases. This put the subject in such a position that a few years ago one spoke of the typhoid bacillus as quite a settled matter. To-day we do not know half as much as then. The very individuality of the plant has been questioned. The difficulty has come from the discovery that a large number of bacteria exist which grow on potato just like the typhoid bacillus, and that some plants identical in all the culture characteristics given by Gaffkey are not so very rare, and occur in the stools of people with intestinal disease. As a result, the Eberth bacillus has been cultured in a great variety of ways, and subjected to a very close scrutiny, in the hope of discovering some character or group of characters by which it could be positively recognized. So far all efforts have been futile. If Babes is correct in his observation, there are a host of other bacteria, either closely allied species or varieties, which occur in man and chiefly in man with typhoid fever.

Even yet the difficulties of the case are only half related; the Eberth bacillus is a protean form, and varies much in its shape, form and manner of growth, with minute changes in its surroundings—as temperature, degree of chemical reaction and composition of the media. Therefore, to day, to demonstrate that a bacillus is identical with Eberth's it is necessary to compare it step by step, culture for culture, under precisely the same conditions with an undoubted culture, and to have derived the original supply from a case of typhoid.

The above conditions can be fulfilled in practically every case of typhoid fever which has died before the disease has passed off, and the original microscopic findings can be verified in the same way. Those conditions have never been fulfilled in a single case of other disease. We are, therefore, justified in claiming the existence of a peculiar bacillus or bacillus group in every case of typhoid. This is the ground on which the claim of the typhoid bacillus depends.

It rests on the same evidence as the spirillum of relapsing fever, the plasmodium of malaria; both are always to be found in their respective diseases, never in health or other diseases. It is, therefore, clear that the typhoid bacillus and typhoid fever stand in some sort of causative relation; things which vary together are connected causatively. From analogy and the improbability that the bacilli are the result of a secondary invasion, the bacillus is commonly accepted as the cause of the disease. No careful student claims this as proved, neither is the law of gravitation.

A few authors have attacked the integrity of the bacillus, and argued that typhoid fever is a condition, and the bacillus in reality a variety of species, as in the summer diarrhæa of infants. Others hold that the plant is simply a modification of a common denizen of the intestine. But epidemiology and clinical study point so clearly to a specific disease transmitted from case to case that I do not think these views need be entertained, at least until their supporters produce some substantial evidence.

The distribution of the plant in the body bears a close relation to the nature of the disease. First, it occurs in the substance of the swollen Pever's patches, before these have sloughed, not simply in the mucosa, but in the round-cell aggregations. After the surface has become eroded and an ulcer is formed, the surface becomes literally coated with all sorts of bacteria, cocci, streptococci and bacilli; among the latter there is often a rather long bacillus, which Klebs at one time held to be the cause of the disease. Evidence, however, points to its being distinct from the typhoid bacillus. It only occurs on and in the surface of the crosions, not deep in the tissue. Nearly, if not quite, simultaneously with the appearance of the bacillus in the follicles, the lymphatics of the mesentery swell and show nests of the same bacillus. The nests contain from fifteen or twenty bacilli to hundreds, and form a mass varying in size from that of a nucleus to one very much larger. The centre is apt to appear almost homogenous or finely granular; but the circumference clearly shows short, straight, irregular looking bacilli. The irregular appearance is due to parts of the bacilli staining less than the rest.

The spleen shows precisely the same state of affairs. According to the duration of the disease and other factors, the number of

colonies vary greatly. In advanced cases even two hundred sections may be examined before a colony is found. From this their prevalence runs up to as many as fifteen or twenty in a single section.

So far the colonies have been described as being in the tissue, between the cells, not as bearing any particular relation to the blood-vessels or other parts. To this the liver offers a contrast. Here the plant is apt to occur in the form of distinct thrombi, which have grown from minute emboli.

In the kidneys the colonies occur chiefly in the cortical portion; are often present, at times abundant, but apparently are not present with the same regularity as in the spleen.

Besides the above organs, the typhoid bacillus may be found in most any part of the body. Thus it is apt to occur in those cases of lobular pneumonia which so often complicate cases of typhoid. It has also been reported as existing in the meninges in cases of complicating meningitis, and in abscesses in such different parts of the body as the parotid glands and the tibie. At times the bacillus is found alone, but mostly in company with some accepted pus-producing bacterium.

Numerous examinations of the blood in all stages of the disease have been made, and observers have reported positive results, especially from material procured by opening a rose spot. Others have failed. That the plant can occur in the blood, the emboli in the liver demonstrate; nevertheless, none of the observations are above question; many simply depend on the microscope and are absolutely worthless; others are supported by cultures, but in no cases have these been carried to that degree of fineness and accuracy necessary to establish even a probable diagnosis. Examination of the blood in doubtful cases for purposes of diagnosis is therefore a failure, and until our knowledge is greatly improved must remain so. Provided the typhoid bacillus was found, its positive recognition would require so much time that the practitioner would take but little interest in the result.

All the above remarks apply to the search for the bacillus in typhoid stools; it may be there or it may not. Many claim to have found it, many have failed. The difficulties are enhanced by the enormous number of bacteria in fæces, and the occurrence of many typhoid-like bacteria in the intestines of typhoid patients. All

sorts of ready methods of isolation have been recommended, but none have stood the test of time. The only feasible method is to make plate cultures from the stools and then search for the desired colonies. These have nothing characteristic about them, are variable, so that in searching for the typhoid bacillus plates of pure cultures of the typhoid plants must be made to serve as a control and comparison in each case. Even then the amount of error is large. Lately word has come that a regal road to the typhoid bacillus was found. All that is necessary is to use agar and put the plates in the thermostat and presto! the next day, thanks to the warmth, the typhoid (pathogenic) bacteria have developed finely, while the others, not liking heat, are retarded in development. Beautiful, but mistaken. All, or nearly all, the germs in the intestines thrive better at 98° than at 68°. There is nothing new about the method except the theory; by it we hasten development and avoid liquefaction; on the other hand, we lose the signs of the only absolute fixed character, non-liquefaction of gelatine, and run a considerable risk of killing the plants we want to study.

Considerable attention has been paid to the urine in cases of typhoid, and the weight of evidence seems to indicate that the bacillus is quite liable to appear in the urine when it contains albumen, that is, early in the course of the disease. As yet, however, the universal doubt which hangs over most everything relating to the typhoid bacillus weighs heavily. More evidence and closer work is needed before positive statements are justified. Reasoning from analogy and the presence of the bacillus in the kidneys, their occurrence in the urine seems most probable.

The only other method of utilizing the bacillus for diagnostic purposes is that of tapping the spleen. This has been done on several occasions, and the method is spoken of as a success. Probably none of us, however, would be willing to have our own spleens tapped for the sake of a diagnosis.

So far only the distribution of the bacillus in the body has been considered. There yet remain the relations of the plant to the cell changes and the result of animal inoculation. As to the latter, the weight of evidence is that the plant is not pathogenic in any of our experiment animals, certainly is not capable of producing any disease to typhoid fever. The inoculation of large amounts kill a certain proportion of the smaller experiment animals, but this is

evidently the result of various poisonous principles introduced, and not due to the multiplication of the bacillus in the body.

In man there are certain focal or localized cell changes, over and ' above the diffuse changes which are more or less characteristic of the disease Thus we have cer ain small round-cell accumulations in the parenchyma of the various organs—the so-called typhoid lymphomata, and also certain other patches characterized by the loss of the staining qualities of the cells, their partial atrophy and the splitting up of the nuclei into two or more strongly staining bodies. The final result is an almost homogenous mass, in which close study may reveal the ghosts of the cells, through which are interspersed a number of deeply-stained, highly refractive small bodies, the remains of the nuclei and some connective tissue cells. These two processes, though presenting similar optical appearances, and until recently grouped together, are in reality distinct. The first is a demonstration of life, the other of death. The same or a similar process is to be recognized in various parasitic diseases. At the present time no direct, or rather topographical, relation has been made out between either processes and the colonies of the typhoid bacillus. The tissue directly surrounding a colony may appear precisely like the body of the organ, or it may be altered in either of the above ways,

Again, either alteration may take place without any recognizable bacilli, so that, allowing the pathogenic qualities of the plant, we must attribute these changes to the general state of the body, as secondary manifestations rather than primary.

Wherever the bacillus is found it is not in the cells, but between them. This shows very clearly about the borders of the colonies; at times a cell can be recognized in the thick of the bacteria. What becomes of the cells which occupied the places of the colonies I do not know; they must be either pushed to one side, digested or simply obscured—very likely all three.

If the reported cases of the detection of the typhoid bacillus in stools and urine are correct—probably some and some are not—we have an ocular demonstration of their mode of dispersion preparatory to reinfection. In my own mind there is no doubt but that the germ escapes from the body in one or in both of these ways. With this point in mind, much work has been done calculated to show how long the typhoid bacillus can exist in dejecta, the ground

and water. Most experimenters have concluded that the time was rather short, the typhoid plant being crowded out by the other germs. This sort of work, however, is not productive of much good; our experiments will never equal those of nature. The answer to this problem is best found by a study of the numerous local epidemics of typhoid where the source is known, not in the bacteriological laboratory. Though there is no spore produced, the time will be found quite long—longer than might be expected of a plant which apparently is incapable of a prolonged independent existence.

What we want to know is how to sterilize the dejecta. The urine is easily cared for. A moderate amount of carbolic acid and time will do it. It is my custom in all cases of parasitic disease to have some antiseptic as carbolic acid always kept in the receptacle for the urine. When dissolved, corrosive sublimate is very effective, but where much albumen is present I have been afraid to rely upon it. The stools are not so easily dealt with; corrosive sublimate is not at all reliable. Carbolic acid in strong solution, so as to produce a 3 per cent. solution when intimately mixed with the dejecta, is safe. Just pouring some carbolic acid on poking the mass with a stick will not suffice. Fæces are very difficult to sterilize. Some simple sort of oven or stove in which dejecta could be dried and burned is a great desideratum. Our large cities are supposed to see that the sewer waste is not dangerous; in smaller places out-door space for such an apparatus is most always at hand.

A word as to the examination of drinking-water. The epidemiologist attributed a prominent role in the spread of typhoid to water contaminated with dejecta long before the bacillus was found. Time has only strengthened this position. Of course, therefore, many searches have been made for the bacillus in water—and what could be more natural than to find it? Yet Koch recently said that all reported discoveries of the typhoid bacillus in water must be accepted with reserve. It may have been found, but as yet the requisites of a demonstration have not been produced. Very much the same may be said of milk. Outbreaks of typhoid are occasionally apparently due to the consumption of milk contaminated with infected water.

In closing we have good reason to believe that Eberth's bacillus is a species and the cause of typhoid fever; that it escapes with the dejecta, and after spending a variable amount of time at large is liable to gain entrance to another individual and reproduce the disease. Lastly, that a large number of unjustified conclusions as to the finding of the bacillus in nature have been given to the profession under the guise of the bacteriology. Some of the records may be correct, none are beyond doubt, and few are really worthy of consideration.—Boston Medical and Surgical Journal.

THE EFFECTS OF TOBACCO UPON THE STSTEM.—According to Science, in an experimental observation of thirty-eight boys of all classes of society, and of average health, who had been using to bacco for periods ranging from two months to two years, twenty-seven showed severe injury to the constitution and insufficient growth; thirty-two showed the existence of irregularities in the heart's action, disordered stomach, cough and a craving for alcohol; thirteen had intermittency of the pulse, and one had consumption. After they had abandoned the use of tobacco, within six month's time one-half were free from all their former symptoms, and the remainder had recovered by the end of the year.— College and Clinical Record.

DRINK FROM COFFRE LEAVES - YAUPON.—The British Medical Journal calls the attention of its readers to the properties of the leaves of the coffee plant. These leaves are said to contain 1.26 per cent, of theine and of coffee berries only 1 per cent Notwithstanding the superior richness in theine of the leaves, 110,000,000 men use the berries, and only 2,000,000 the leaves of the coffee. The suggestion is made that, as soon as it becomes the fashion, we will have in coffee leaves a great rival of the berry. First the art of curing the leaves must be learned, so that the public can be given a popular flavor, and then we will have a new beverage. Let us remind our Eastern readers of the favor which "Yaupon" (Ilex Cassene) once held among the fishermen along our coast. Yaupon contains a notable percentage of caffein (according to Venable, 0 27). Caffein and thein have been used interchangeably, but there is recent reason to believe they are not identical. Certain it is that no lover of coffee would ever admit the equality or similarity of flavor between it and tea.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., GRO. GILLETT THOMAS, M. D., "

The Country, and especially from the medical profession of The Carolinas. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the Journal, by sending the address to this Office—Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and accept ability. All remittances must be made payable to Thomas F. Wood, M.D., P. O. Drawer 791, Wilmington, N. C.

OUR DISTINGUISHED DEAD.

Dr. R. L. Beall—Dr. Alfred Plummer—Dr. Henry Fraser Campbell—Dr. Robert A. Kinloch.

DR. R. L. BEALL.

We make the following extract from the Lenoir Topic:

"Dr. Robert Lamar Beall was born in 1831, and died at his home in Lenoir December 2d, 1891. He became a student at Davidson College in 1847, in his 16th year. In 1850 he entered as a student the University of North Carolina at Chapel Hill. In 1852 he was graduated at that institution with the degree of A. B. In 1852,

'53, '55, '56 he was a student of the Jefferson Medical College. From 1856 to 1866 he was a practicing physician in Davidson county, North Carolina. In 1863 he was sent to the Legislature as a representative of Davidson county. In 1868 he was sent by the good people of this Senatorial district as a State Senator to the Legislature, From 1870 to 1875 he was a trustee of Davidson College. From 1871 to 1874 he was a director of the Union Theological Seminary at Hampden Sydney, Virginia. From 1883 to November 23, 1891, he was a trustee of the University of this State. In 1877 he was sent by Concord Presbytery as a Commissioner to the General Assembly of the Presbyterian Church, South, which met at New Orleans, Louisiana. In 1887 he was sent again by the same Presbytery as a Commissioner to the General Assembly, which met at St. Louis, Missouri. Since 1866 he had been a manufacturer, farmer and physician in Lenoir, North Carolina. Since 1867 he has been a ruling elder 'of this flock of God over which the Holy Ghost had made him an overseer.' Of his gifts and the use he made of them in civic and political relations, and in the various literary institutions which he served as trustee or director, this is neither the time nor occasion to say more than the general statements already made. But as a Christia physician his kindness to the sick and suffering, without regard to financial condition, race or color, made him an example that we should, in all our various callings, strive in our measure to imitate."

Dr. Beall joined the Medical Society of North Carolina May 11th, 1859. Since the reorganization of the Society in 1866 he did not take an active part with it, but had been an ardent supporter of the State Boar: of Health, using his influence for the extension of its objects in the counties around him. He pursued his profession, and kept up the multitude of his obligations, civil and ecclesiastical, in a way that only a chosen and sagacious leader can.

Dr. Alfred Plummer.

"We regret to learn of the death of this estimable gentleman and skillful physician at his home near Middleburg, Vance county, on the morning of December 24th. He was buried in the family burying-ground in Warrenton on Christmas day.

"Dr. Plummer was 81 years old at the time of his death, and was

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the last of his generation, the other ten children of his father having preceded him to the grave. He was the son of Kemp Plummer. Esq., who was a distinguished lawyer of the Warren circuit early in this century. He was for a while a cadet at West Point, one of his associates, and afterwards one of his instructors, being General Robert E. Lee. He left that institution from a sense of chivalry towards one of his companions, against whom he was called upon to give information, preferring to return to private life rather than cause the dismissal of his fellow-cadet.

"He then studied medicine and was graduated from the University of Pennsylvania, and locating in Warren, the county of his birth, devoted himself to the practice of his profession there and in the neighboring county in Virginia. His charity to his poorer neighbors was unfailing and his gentleness of character endeared him to a large circle of acquaintances, while his file fund of humor and social talents made his companionship most agreeable to all who knew him well."—News and Observer.

Dr. Plummer did not ally himself with the Medical Society of North Carolina, and therefore his reputation was rather limited to the smaller circle in which he so zealously practiced.

HENRY FRAZER CAMPBELL, M.D.

When one looks back over the record of the literary productions of one even as prolific as Dr. Campbell, we get but a meagre view of the versatility of the writer, the readiness of the speaker, the originality of the thinker. Dr. Campbell's reputation is far more extensive than any bibliography of his works can make him. The writer remembers him first in the capacity of examiner in practice of medicine on the Richmond Army Board in 1863 His kind consideration there of the half-frozen and trembling candidate who came to seek a commission will never be forgotten. Bidding the candidate draw nearer the fire and make himself comfortable, he began on topics which were very remote from the subsequent examinations on pneumonia and pleurisy and the physical signs of diseases of the chest The examiner became so interesting that all thoughts of making a blunder were forgotten, and all of the student's choicest cramming came to the tongue's end as a pleasurable conversation. The examiner himself was as much interested

in the latest clinical terms of Hughes Bennett as though he had never heard them, and when the candidate dilated upon the riches of Andral and Lænnec, he could see he had already won a place in the examiner's heart, and was sure of one vote. Later on in life he passed delightful companionship with his senior at meetings of the American Medical and Public Health Associations, and learned to estimate what an immense brain worker he was and how procrastinating a writer. Having delivered a long paper on the Gynecological Position, he informed us he had not written a line of it, and en route from Richmond to Augusta shut himself up in a hotel at Wilmington for days, writing out the paper that the publication committee was now demanding

He was in 1885 President of the American Medical Association, and had had all the gifts of Society honors in the local, State and national societies

The following sketch of Dr. Campbell was written for the Atlanta Medical and Surgical Journal at its request in 1885 by Dr. Eugene Foster, and met the approval of Dr. Campbell himself;

"Dr. Henry Frazer Campbell was born in Savannah, Georgia February 10, 1824 His father, James Colgan Campbell, was born in County Antron, Ireland His mother was Mary R. (Eve) Campbell, the only daughter of Joseph Eve, and a sister of Dr. Joseph A. Eve, of Augusta. Dr. H. F. Campbell, after having received an academic education, begat the study of medicine at the age of 15, and in March, 1842, when 18 years of age, graduated M.D. from the Medical College of Georgia-now the Medical Department of the University of Georgia Immediately after graduating in medicine he established himself in his profession in Augusta, where he continued to reside and practice his profession with an exception of the period f om 1862 to 1865, when he was engaged in the military service of the Confenerate States at Richmond, Virginia, and in 1867-'68, when he resided in New Orleans, Louisiana, and filled the chair of professor of surgery in the New Orleans School of Medicine.

"Francis Bacon said: 'I hold every man a debtor to his profession; from the which, as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereunto.' Let us inquire how Dr. Campbell has discharged this duty to his profession.

"From 1842 to 1854 he filled the position of assistant demonstrator and demonstrator of anatomy in the Medical College of Georgia; from 1854 to 1857 was professor of comparative and microscopical anatomy; 1857-'67 was professor of anatomy, a din 1867-'68 was professor of surgery in the New Orleans School of Medicine, and clinical lecturer in the Charity Hospital, New Orleans, Louisiana. In the fall of 1868 the Medical College of Georgia created the chair of operative surgery, and invited Dr. Campbell to return from New Orleans and accept the professorship thus created. Dr. Campbell complied with the request; and filled the chair of operative surgery and gynecology until 1881, when Dr. L. A. Dugas resigned the chair of principles and practice of surgery, and Dr. Campbell was elected professor of principles and practice of surgery and gynecology.

"During the late war he was medical director of the Georgia Military Hospitals at Richmond, Virginia, and a member of the Army Medical Examining Board of the Confederate States; he is a member of the American Medical Association, was vice-president in 1858, and is now (1885) president, elected at the late meeting in Washington, D. C; member of the Medical Association of Georgia, and elected its president in 1871; a member of the American Public Health Association and vice-president in 1880; a member and one of the founders of the American Gynecological Society: member and vice-president of the American Surgical Association; president of the Augusta Library and Medical Society in 1878; a correspondent of the Academy of Natural Sciences of Philadelphia, elected in 1858; corresponding member of the Imperial Academy of Medicine of St Petersburg, Russia, elected in 1860; elected in 1878 foreign corresponding member of the Medical Society of Sweden; member of the State Board of Health of Georgia: elected a member of the Abingdon Academy of Medicine in 1879; elected in 1882 an honorary member of the American Academy of Medicine.

"Any sketch which omitted to mention the discovery of the excito-secretory system of nerves by Dr. Campbell would do him great injustice. Three years after his discovery the great English physiol gist, Marshall Hall, announced through the *London Lancet* that he had discovered this system. Upon reading Dr Hall's paper, Dr. Hall promptly presented him with copies of his publications

several years preceding that of Dr. Hall. Dr. Hall, immediately by letter to Dr. Campbell and through the medical press, withdrew his claim and awarded the credit to Dr. Campbell. He said: 'It would be unjust to deny that Dr. Campbell has the merit of having first called attention to the excito-secretory system in the year 1850, and that he imposed this very designation in 1853. So far Dr. Campbell's claims are undeniable, and we would say palmam qui meruit ferat.' An examination of the vast number of contributions which he has made to medical science attests the versatility of his genius, and points to the enthusiasm of the scientist."

ROBERT ALEXANDER KINLOCH, M.D.

Dr. Kinloch was born in Charleston February 20th, 1826, and died some time in December last. He was the best known surgeon in the South, and his death has saddened the hearts of the entire profession. Dr. Kinloch was a surgeon of remarkable boldness, but eminently safe. His resources in the most difficult situations were always equal to the occasion.

He was the head and front of the Medical College of South Carolina, and for its reputation he worked with untiring zeal. We will not attempt to do justice to his life-work in as short space as we have left, but expect in a future number to have a biographical sketch with an appropriate portrait.

THE LONDON LANCET AND SOME AMERICAN MEDI-CAL JOURNALS.

The London Lancet announces in the first issue of 1892 that it enters upon its seventieth year. It has been under the editorial management of the family of its founder, Mr. Wakley, during all these years. To American medicine seventy years is very great, but can only be appreciated by taking up the first volume of the Index Catalogue of the Library of the Surgeon General's Office, and spending a morning in the first few pages of this great tome. It is a veritable cemetery of medical periodicals, as far as America is concerned, but it lacks the liveliness of an actual cemetery foras-

much as the registrar has forborne the wise epitaphs he might justly have appended to the dull inscriptions. Some comparisons of American journals with the Lancet may serve as historical milestones. When the Landon Lancet (1821) came upon the stage, it had one vigorous predecessor, the journal that was afterwards known by the title of the Medico-Chirurgical Review. This was a stately quarterly, always sustaining the very highest position in the medical world, dying in or about 1878, regretted by a group of readers not large enough to support it.

In America, Baltimore had had its Medical and Physical Recorder (1808) and its Medical and Philosophical Lyceum (1811); Philadelphia had had her Philadelphia Medical Museum, 1804-1809. The Boston Medical Intelligencer begun in 1823, then merged into the New England Journal of Medicine and Surgery, and finally into the Boston Medical and Surgical Journal. New York had her Medical and Physical Journal, that lived from 1823 to 1830. In the South, Charleston had her Carolina Journal of Medicine and Surgery in 1825, but dying in its infancy, there was no succession of the literary spirit until in 1848 the Charleston Medical Journal and Review was begun, and going through many phases preserved its identity fairly until 1877. In the new State of Ohio, the Medical Repository was begue in 1826, continuing its publication one year, and in the same State was publisheed at Cincinnati The Western Medical and Physical Journal, 1827-'28. In Philadelphia, which was then, as it has always been since, the centre of American medical literature, The American Journal of the Medical Sciences had its foundation in 1827. Of all the journals named this is the only one that has had a continuous life (we may also be nearly right in according the same distinction to the Boston Medical and Surgical Journal) from a period nearly touching that of the birth of the London Lancet. It is wrong to suppose that all of these journals were not worthy representatives of medical science. In our country we think we are safe in saying that medical journals had no foundation other than that of the reputation of the editors as teachers and leaders in thought, the exception might be made of the few journals that had at their backs medical publishing houses. The expiration of so many of these periodicals was due to the death or resignation of the editors. they finding it more profitable after the early years of literary

enthusiasm had been satisfied, sought the more lucrative occupations which riper reputation brought them. In the case of the Luncet its present life may be due, we assume, at least, to the impress and influence of its founder transmitted through successors in the same family, circumstances that are very exceptional.

Whatever we may think of the Larcet on this side of the water in comparison with its younger rival, the British Medical Journal (begun 1857 as a continuation of the Transactions of the British Medical Association), it has maintained a distinct standing in its presentation of the literature of medical science that has made it the most popular of the medical journals in the world. One is always sure to find, besides the most solid and profound topics of the day, the discussion of popular themes in its editorial columnsthemes of sanitation and public health and of the welfare of populations as to their occupations-which the sterner judgment of the writers for the old Medico-Chirurgical Review always excluded as being rather undignified; but upon this line the Lancet has had the final approval of the reading world. How could the English doctor now do without this great journal, or how could the Englishspeaking doctors of the world supply the loss of such a welcome weekly visitor to their offices!

For the first week of the year 1892 the issue contains 120 double-column pages of reading matter and 80 pages of advertisements, which would be, in the type usually employed in medical text-books, 8vo. size, the equivalent of from 400 to 500 pages.

If there are any of our readers to whom this information may be new, we advise them to try a year of teaching from the *Lancet* and see if they will not find great profit.

MR. HUTCHINSON ON THE GALVANO-CAUTERY LOOP.—In a recent article on the "Surgery of the Tongue" (British Medical Journal December 7-12). The galvano-cautery loop is a very ingenious instrument, but far inferior for all practical purposes to the cold wire. He never employs a chain or any complicated apparatus. His objection to galvano-cautery is the tendency to secondary hemorrhage.

REVIEWS AND BOOK NOTICES.

A PRACTICAL TREATISE ON THE DISEASES OF WOMEN. By T. GAILLARD, M.D., LL.D. Sixth Edition. Enlarged and Thoroughly Revised by P. F. Mundé, M.D. Lea Bros. & Co, Philadelphia.

The profession will welcome this volume as the revised expression of the opinions and experiences of the author, T. Gaillard Thomas There is, as far as we know, no such scholarly exposition of the matters included in the practice of gynecology as that set forth is this work, in its previous editions and in this its latest form. Dr. Thomas has long held an easy lead in his specialty, and his accuracy of observation and remarkable application of all means to secure his ends, has fastened his reputation for all time among the foremost practitioners in this branch of medicine. We meet again with respect the able classifications which marked all the earlier editions, and recognize the fact that he is in nowise satisfied to have attained an eminence, but is determined to preserve it. The additions made by the editor are not always so distinctly set forth as to indicate to which one belongs the newer ideas-but this will hardly be co sidered a fault, as Dr Mundé's reputation will sustain him in the task he undertook and has so acceptably performed. The subject of injury to the perineum is discussed again fully and the necessity for its restoration after laceration insisted upon-no credence being given to the claims that immunity from suffering can follow any neglect to repair it. Immediate repair is advised, and the opinion is clear that but few exigencies arise which will prevent an operation within the first few hours after the birth of a child and the infliction of the injury. For the secondary operation Tait's flap-splitting method is advised as the most satisfactory. missed with some regret and surprise a more elaborate and better illustrated description of Emmet's latest operation, and that furnished in the text does not agree with the one given in Pepper's System of Medicine, or the later ones given in the medical periodicals. The theory upon which the operation is based, and the methods pursued to complete it have seemed to us an entirely new and justifiable departure from all previous attempts to cure this

troublesome lesion, and its success in the hands of its distinguished originator deserved, we submit respectfully, a more critical exposition than it has received.

While all due consideration is extended to Næggarath's claim that gonorrhæa is the chief cause of nearly all of the inflammatory conditions of the uterus and its appendages, it is stated that his doctrine is too sweeping in extent, and this seems to be the growing opinion now.

The treatment of chronic endometritis brings out Dr. Thomas' opposition to all intra-uterine applications-his dependence being upon the general restoration of health, cure of laceration of the cervix, reduction of displacements, the extirpation, if possible, of any new growth and the use of ergot for the relief of such uterine enlargement as may exist. There is, no doubt, a universal condemnation of the injection of fluids into the cavity of the uterns, but the use of stimulating applications, as solution of zine chloride, compound tincture of iodine, earbolic acid, solution of the subsulphate of iron and others of like character, caustic and astringent, have such a large endorsement from the most capable men, that we are not surprised to find that Dr. Mundé takes issue with the views of the author. It appears now that it is a well established custom. based upon safe experience, to introduce some one of the classes of agents mentioned into the cavity of the uterus after the use of the curette, and a late authority has said that only a sharp curette can be relied on to clear up the growths that so freely cover the uterine mucous membrane in this troublesome disease. There can be no doubt that conservative methods have followed from the accidents that resulted from the free, and at one time common, use of intra-uterine medication, and these seem now so safe that the readers of this work will most probably adopt the suggestions of the editor in preference to those of Dr. Thomas.

There is a wealth of instruction in the volume, and the rehance upon such authority as this work, will be increased by its new and enlarged edition. We do not feel the need of an extended notice for this volume, but we wish to call attention to the instructive illustrations, many of which are entirely new to most of our readers, and some new to all.

The work is gotten out in the usual good style and clearness which have characterized the former editions, and it will be a useful and welcome addition to the physician's library.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR, IN-CLUDING A SKETCH OF AURAL ANATOMY AND PHYSIOLOGY. By D. B. St. John Roosa, M.D., LL.D. Seventh Revised Edition. New York: William Wood & Co., 1891.

Dr. Roosa's book is an old friend, to be found on the library table of specialist and general practitioner, the latter class especially finding in it just the examples of disease he needs to lead him to a diagnosis. Written by the practiced hand of one who knows the straits into which the general practitioner is often driven, he has made plain the dark ways, and by his aid many a reader has been able to render more efficient service to his patients.

The anthor has done another service to the science of otology, he has written the book which, as far as American literature is concerned, has taken away the reproach, which was almost stereotyped, that there was no science of otology. Even now otology is an unpopular department of surgery compared with any other specialty, but it is by such good work as our author has done that it will attract the attention of the future student and give confidence to the general practitioner in the practice he is compelled to do in that line.

In the preface to this edition the author says the larger part of this work is essentially a digest of his own experience extending over more than twelve thousand patients for which he had the personal responsibility.

The author has always held some peculiar views about the bad effects of quinine on the hearing, substantiating them by cases, but in this particular we must confess his experience runs counter to the observations of physicians in the South who have had very extensive experience in the employment of this universally used drug.

His observations on Deaf Muteism should be read by all officials having charge of these unfortunates, whether they understand technical medicine or not. "Some asylums for the deaf-mutes in this country," he observes, "are not attended by physicians competent to examine and treat the ear. Many inmates require constant and special care of their ears; especially is this true of those affected with suppuration of the ears, of whom there are about 20 per cent, in the asylums.

The printing and illustrations of the volume are of good quality,

and many of the cuts are entirely new, prepared for this edition from the museum of the late Prof. William Darling.

Saunders' Question Compends. Essentials of Bacteriology:
Being a Concise and Systematic Introduction to the Study of
Micro organisms for the Use of Students and Practitioners By
M. V. Ball, M.D., late President of the German Hospital,
Philadelphia. Philadelphia: W. B Saunders, 913 Walnut St,
1891. [Price \$1.00]

ESSENTIALS OF Physiology, Arranged in the form of Questions and Answers Prepared Especially for Students of Medicine. By H. A. Hare, B.Sc., M.D. Third Edition, with the addition of handsome series of plate illustrations from Arnold's "Icones Nervorum Capitis." W. B. Saunders, 1891. [Price \$1.00.]

Nervous Diseases and Insanity: Their Symptoms and Treatment. A Manual for Students and Practitioners. By John C. Shaw, M.D. With 48 original illustrations, mostly selected from the author's private practice. Philadelphia: W. B. Saunders, 1892.

These volumes are designed for students who are coaching for examinations, and should be carefully looked over by the members of examining boards. They are cheap, and can be, as they have been, made to serve a fraudulent purpose in State examinations. In the form of questions and answers they are most objectionable, and for the student who wants to be true to himself and honest towards the Board of Examiners, nothing we have seen so far is as good as the little book for sele-examination noticed in the November JOURMAL.

THE MEDICAL FORTNIGHTLY is the name of a sprightly medical journal which begins its life with the new year in St Louis, Mo.

This journal is conducted by Bransford Lewis, M.D., and has many features about it that will make it acceptable to the fraternity of editors and a large number of subscribers. The original contributions have the fac simile signatures of the writers. There are two "process" illustrations, one of the renowned dermatologist Kaposi, the other of St. Bartholomew's Hospital. The list of collaborators is a strong one, and if it means more than an ornamen-

tal literary head-piece, our confrére will have some good material for our selection. The West is capable or so many good things, when they really try, that we have no fear that our younger brother is going to be a sturdy member of the guild.

Practical Anatomy. By Henry C. Boenning, M.D. F. A Davis, Publisher, Philadelphia. Pp. 458. [Price \$2.50.]

With the exception of the section devoted to osteology, this book seems to the reviewer very imperfect. Absence of necessary detail is very noticeable throughout, and too many important facts are omitted to allow it to be a useful text-book. For example, this short description of the common carotid artery, viz: "The common carotid artery on the right side is a branch of the innominate; on the left side it comes from the arch of the aorta. It divides just below the hyoid bone into the internal and external carotid," may be the soul of brevity, but is at the same time an inexcusable insult to that noble vessel.

Many of the illustrations are bad. Altogether, the reviewer has been unable to find any reason for either the existence or the name of the book.

R H. W.

Syllabus of the Obstetrical Lectures in the Medical Dr Partment of the University of Pennsylvania. By Richard C. Norris, M.D., Demonstrator of Obstetrics in the University of Pennsylvania. Second Edition W. B. Saunders, Philadelphia, 1891. [Price §2 00.]

This syllabus, according to the author's preface, was designed to assist the student in note-taking, and the subject-matter so arranged that uninterrupted attendance upon the lectures is essential to a full knowledge of the cause. If any book helps the student to do real work as this seems to do, we are willing to commend it.

PROPRIETARY REMEDIES.—Thirty years ago Great Britain derived from patent medicines a revenue of \$210,000. The same tax now yields \$98,500,000 a year. All this increase is at the expense of the gulled public; the honest apothecary and the doctor, being large losers.

This Society met in stated meeting, at Asheville, on January 4th, 1892.

The meeting was called to order by the newly elected President, Dr. Karl von Ruck, who, on taking the chair, delivered a short address, in which he made a strong appeal to the members for increased exertion and interest in the labors of the Society. He said the members should, in papers and clinical reports, contribute their best efforts, according to their individual ability, and never be satisfied with anything less. From their professional attainments a high character of work could be expected, which the members would be willing to present anywhere, and not only to a local medical Association. He pointed out the benefits that would accrue from such efforts, not only to the Society and its position as an auxiliary to the State Medical Society, and from its influence with the profession in the State and elsewhere, but to the individual member as conducive to individual advancement in proportion to the efforts expended, it requiring no special argument to show that every carefully paper or accurately observed and recorded case from practice, is an important and necessary means for individual advancement in the study of medicine and self-education, even if the paper or report were never read or presented to the profession.

Dr. L. B. McBrayer presented an interesting paper upon Maternal Impressions, in which be reviewed the literature upon the subject and related some personally observed illustrations. He expressed the belief that, inasmuch as the evidence showed the possibility of psychical effects upon the mother producing the monstrous, hideous and imperfect reflections of similar impressions upon the offspring, so, by the same principle, the good, noble, beautiful and perfect would result from corresponding influences impressing themselves with equal force upon the mother.

He recommends, therefore, efforts on the part of the professional adviser toward interest and educatio of the interested public, in a subject capable of bringing about great advancements in the physical and intellectual aspect of society at large, and urges especially higher mental and physical culture of the female sex.

The paper was discussed by Drs. Williams, Ballard, Watson, Ambler and Crawford, all of whom had seen undoubted cases of

maternal impressions of the undesirable sort, and believed that systematic efforts, especially with more intelligent parents, in the direction recommended by the essayist would, apart from the great interest from a psychological standpoint, promise some real advantages to future generations.

Dr. Williams reported a case of injury to the drum membrane with displacements of the ossicles, resembling Ménièrés disease, from which the patient is slowly recovering under local treatment of the injury combined with the use of Politzer's method of inflation, by which latter the ossicles were each time made to assume their natural position, accompanied by an entirely involuntary, complete "turn out" of the patient's body.

Dr. C. E. Hilliard reported a case of gunshot wound, the ball entering near the chin in a downward and backward direction, emerging at the base of the neck posterior, near the vertebral column of the same side, without producing any injury to the vessels or other structures of the neck, the patient making a good recovery under simple dressings of the wounds.

A CHARLESTON doctor named Harriss made experiment with the thermometer to ascertain the ratio between the heat of the body and the upper atmosphere, 3d July, 1806.

THE FIRST INTRODUCTION OF INOCULATION INTO SOUTH CARCLINA was by Mr. Mowbray, a surgeon, who in a short time inoculated 450 persons. [Thacher.] Dr. Ramsay (Hist. S. C.) gives the date at 1738.

The New born Child of a Female Opium Victim Dies for Need of Opium—"Literature, however, shows that when the female opium victum brings forth a child, such offspring is prone within forty-eight hours to die of an apparently causeless collapse. The real cause of such collapse is, however, the read of opium. The child in the first few hours finds itself not only struggling with the new co ditions of life, but also totally deprived of its nerve-stimulant, and it dies when its life might have been saved by doses of landanum perhaps sufficiently large to kill an ordinary infant."—H. C. Wood in A System of Practical Therapeutics.

THE INTERNATIONAL EXECUTIVE COMMITTEE OF THE PAN-AMERICAN MEDICAL CONGRESS.

The Committee on Organization of the Pan-American Medical Congress, at its meeting at St. Louis last October, elected the following International Executive Committee:

The Argentine Republic-Dr. Pedro Lagleyze, Buenos Aires.

Bolivia-Dr. Emelio Di Tomassi, La Paz.

Brazil-Dr. Carlos Costa, Rio de Janeiro.

British North America-Dr. James F. W. Ross, Toronto.

British West Indies-Dr. James A. De Wolf, Port of Spain.

Chili-Dr. Moises Amaral, Santiag.

United States of Colombia-Dr. P. M. Ibanez, Bogota.

Costa Rica-Dr. Daniel Nunez, San Jose.

Ecuador-Dr. Ricardo Cucalon, Guayquil.

Guatemaia-Dr. Jose Monteris, Guatemala Nueva.

Hayti-Dr. D. Lamoihe, Port au Prince.

Spanish Honduras-Dr George Bernhardt, Fegueigal.

Mexico-Dr. Tomas Noriega, City of Mexico.

Nicaraugua-Dr. J. I. Urtecho, Grenada.

Peru-Dr. J. Casamira Ullora, Lima.

Salvador-Dr. David J. Enzman, San Salvador.

Spanish West Indies - Dr. Juan Santos Fernandez, Habana.

United States-Dr. A. Vander Veer, Albany, New York.

Uruguay-Dr. Jacinto De Leon, Montevidea.

Venezuela-Dr. Elias Roderiguez, Caracas.

Hawayii, Paraguay, Santo Domingo, and the Danish, Duch and French West Indies are not yet organized.

Nominations of local officers have been received from a majority of all the members of the International Executive Committee, and a number of the lists have been confirmed by the Committee on Organization. These will be announced as rapidly as acceptances are received.

THE PAN-AMERICAN MEDICAL CONGRESS IN THE UNITED STATES OF COLOMBIA,

Pursuant to nominations by Dr. Pedro M. Ibanez, of Bogota, a member of the International Executive Committee from the United

States of Colombia, the following organization of the Pan-American Medical Congress has been effected in that country:

Vice-President-Dr. Pio Rengifo, New York.

Secretaries of Sections-"General Medicine," Dr. Ignacio Guterrez Ponce, Paris: "General Surgery," Dr. Rafael Rocha Cassilleo, Bogota: "Military Medicine and Surgery," Dr. Abraham Aparicio, Bogota; "Obstetrics," Dr. Joaquin Maldorado, Bogota; "Gynecology and Abdominal Surgery," Dr. Jose M. Buendia, Bogota; "Therapentics," Dr. Mannel Plata Azuero, Gunduas; "Anatomy," Dr. Joan D. Herrara, Bogota; "Physiology," Dr. Antonio Bargas Vega, Bogota; "Pathology," Dr. Nicolas Osorio, Bogota; "Diseases of Children," Dr. Ant. Gomez Calvo, Bogota; "Ophthalmology" Dr Proto Gomez, Bogota; "Laryngology and Rhinology," Dr. Louis Fonnegra, Bogota; "Otology," Dr. Carlos Esguerra, Bogota; "Dermatology," Dr. Daniel E. Coronada, Begota; "Orthopædics," Dr. Juan E. Manrigue, Bogota; "Naval Hygiene and Quarantine," Gabriel I Castaneda, Bogota: "General Hygiene and Dermography," ---; "Mental and Nervous Diseases," Dr. Pablo Garcia Medina, Bogota; "Oral and Dental Surgery," Dr. Guillermo Vargas Paredes, Bogota; "Medical Pedagogics," Dr Jorge Vargas, Bogota; "Medical Jurisprudence," Dr. Leoncio Barreto, Bogota.

Auxiliary Committee (each member being the official representative of the Congress in his respective city).—Drs. Nicolas Osorio, Andres Posada Arange, Jorge E Delgado, Eugenis de la Hoz, Domingo Cagiad, Jose Manuel Rodrigues, Paulo Emilio Villar, Felix M. Hernandez, Rafael Calvo, U. Ribon, Milceades Castro, Cayetrano Lombana, Jose M. Martinez, Isaias Saavedra, Severo Forres, N. Villa, Evaristo Garcia, Miguel Caicedo, Emilio Villamizar.

The following medical societies have been elected as auxiliaries of the Congress: Academia Nacional de Medicina, Academia de Medicina de Medellin, Sociedad de Medicina del Cauca.

The following medical journals have been designated as official organs of the Congress: Revista Medica, Bogota; Revista de Higiene., Bogota; El Agricutor, Bogota; Boletin de Medicina del Cauca, Cali; Andles de la Academia de Medicina de Medellin, Medellin.

The expressed wish of the profession of the United States of Colombia is for a date of meeting during the Columbian Exposition.

CHARLES A. L. REED.

Cincinnati, January 17, 1892.

Secretary General.

CORRESPONDENCE.

MORE ABOUT LARGE CHILDREN.

Messrs. Editors North Carolina Medical Journal:

DEAR SIRS:—Dr. Thomas Hill, of Goldsboro, reports a child delivered by him weighing 15 pounds. This reminds me of several large children that have been born in the last fifty years in this neighborhood. About fifty years ago the late Dr. J. A. Russell, who was afterwards my partner in the practice of medicine, delivered a lady of a female child weighing 16 pounds per vias naturales. I frequently heard both the doctor and the mother speak of the weight, and am acquainted with the child, who is now a maden lady of about fifty years of age.

In 1859, after a hard labor, but without instrumental assistance, I delivered Mrs. II. of a male child weighing 15 pounds. She had hour-glass contraction, and I had to introduce my hand into the uterus. There was so much delay in delivering the shoulders that the life of the child was sacrificed. At my visit the next day I found this patient sitting up in bed dipping snuff and gossipping with a company of neighbors. She did well. The child measured eight inches across the shoulders. This lady died a few years afterwards of diabetes mellitus.

In 1871 I delivered a woman of a male child weighing 14% pounds. She did well, and the child is now a robust, healthy youth. No instruments were used.

Stem, N. C., 1892.

JOHN W. BOOTH, M.D.

CURRENT NOTES.

VAUCINATION was introduced into Charleston in 1802 by Dr. David Ramsay.

Owing to new sanitary measures in England, there has been a diminution of more than 30 per cent. in the death-rate from consumption since 1861.—Lancet.

"MEDICINE is my wife; science is my mistress; books are my companions; my study is my grave: there I lie buried, the world forgetting, by the world forgot."—BENJ. RUSH.

DEATH OF A CENTENARIAN.—Mrs. Rebecca Brown, of Wilmington, died at her daughter's home in Kenansville, this State, at the remarkable age of 103. There are very few authentic cases of such longevity.

FIRST MEDICAL BOOK PUBLISHED IN AMERICA.—Rev. Thomas Thacker, the first minister of the Old South Church, published a work entitled "A Brief Guide in the Small Pox and Measles," 1677.—Thacker's History of Medicine in America, Boston, 1828.

IS THE THE FIRST INCCULATION AGAINST SMALL-POX IN NORTH CAROLINA?—Dr. Hugh Williamson, author of the "History of North Carolina," who was appointed by Governor Caswell as chief medical officer of the militia in 1779–1780 (recorded in Thacher's American Medical Biography), says that during the period of his residence in Edenton (1779) he was invited to Newbern, "for the purpose of communicating the small-pox to such as had not experienced the hencits of inoculation"

THE TOMATO THE APPLE OF LONGEVITY.—Dr. Siceary, a Portuguese Jew, settled in Virginia in the last century [Thacher], introduced that "admirable vegetable the tomato. He was of the opinion that a person who should eat a sufficient abundance of these apples would never die. Whether he followed his own prescription is not known, but he certainly attained an old age, and particularly for the climate in which he lived. The tomato is raised in abundance in Virginia and the adjoining States, and is regarded a great luxury, and by some is considered a preservative against biliousness."

Dr. JOSEPH HOLT has returned to New Orleans to resume the practice of medicine —N. O. Med. Jour.

THE United States Supreme Court has decided that a court may not order a medical examination of a person in a civil case against his or her will.

DR. FREDERICK BEDFORD, of New York City, died December 28th, 1891, aged 54. He was the son of Prof. Gunning S. Bedford. He was one of the founders of the New York County Medical Association.

A MEDICAL DICTIONARY has just been published by Boas, of Berlin. It has 400 small pages, comprises words i | German-French-English, English-German-French, French German-English, and a Latin-German-English-French section.

Peroxide of Hydrogen an Antidote for Hydrocyanic Acid.—Prof. Kobert has proved experimentally that hydrogen peroxide is a valuable antidote for hydrocyanic poisoning. It is to be given internally as well as subcutaneously, until the odor of the acid can no longer be recognized in the exhalations and the symptoms subside.—Boston Med. and Surg. Jour. Jan. 14th.

LINEAR CRANIECTOMY FOR MICROCEPHALUS - The Journal of Nervous and Mental Disease, October, 1891, contains a report of a case in which Dr. J. C. McClintock performed this operation. The patient was 31 years old, idiotic, and could scarcely raise her hands or feet; she never had been able to sit up. The head was very narrow; the frontal region showed great arrest of development Protrusion of the right eyeball seemed to be a partially compensatory effect of the intracranial pressure. A strip of bone about 1 inch wide was removed from each side of the head, extending from the posterior superior angle of the parietal bone to just above the superciliary ridge, leaving a bridge of bone about 3 inch wide over the superior longitudinal sinus. Recovery from the operation took place in little over a week. Marked imgrovement resulted; the child became quieter, exercised her limbs, raised her body, and exhibited a wish to join in play with other children. - Supplement to Brit, Med. Jour.

Physicians more frequently err in refusing credence than in accepting too much.—H. C. Wood.

THE Influenza Number is a nevelty of the *Times and Register*. The issue of January 16th is devoted to short lectures, editorials, extracts, etc., bearing upon epidemic influenza.

HYOSCYAMINE IN LETTUCE.—We note that Mr. Dymond has discovered in the common lettuce flower an extract which has mydriatic properties which was determined to be due to the presence of hyoscyamine. The amount found is not more than .02 per cent.

Post-Prandum Pleasantries in Colloquial Latin, by Constantine Stander, is the name of an unique publication designed to give some pleasant practice in the use of colloquial Latin. School-boys, yes and their teachers too, would enjoy this suggestive art, and probably prefer it, above the old method of endermic application-

The Detection of the Adulteration of Butter.—An instrument which is likely to be found very useful in rapidly detecting adulterations in oils, glycerine, butter, etc, has recently been devised by a continental chemist named Souden, under the name of the "liquoscope." It consists of cylinder of glass containing glycerine, in which are immersed two hollow prisms side by side. When both these are filled with substance having identical refractive indices, a horizontal line seen through them appears continuous, but when their contents have different refractive indices the line is apparently broken, one section being above another.—Lon. Lancet.

Chlorine and Sodium made by a new electrical process is described in the *London Lancet*: Electrolytic vessels are charged with a solution of common salt, through which a current of electricity is then passed, thus decomposing and splitting up the salt into its elements, chlorine and sodium. The chlorine is conveyed away to combine with lime to make bleaching powder, and the caustic soda is said to be very pure. This process has the merit of saving 50 per cent. upon the old processes of Leblanc (conversion of salt into sulphate soda, and heating with coal and chalk); or that of Solvay (treating brine with ammonia and carbonic acid gas, carbonate soda being formed and precipitated).

Scholar, Scientist and Slave, Various Phases in the Life of a Medical Man.—The Maltine nanufacturers do very much towards entertaining the doctor by various pictorial methods, none of which are below a very good standard of the lithographer's art. If they do give to their Maltine preparations the alternate pages, others are effectually surrendered to the doctor. The series of pictures in the booklet are: Scene in an operating room at college. The surgeon and his assistants in the ghostly toggery of antiseptic cult, while "the boys"—ah, me! how much better they appear to be than their congoners of the antebellum days—are gazing with varied expression of interest at the splendid operation. The Maltine poetry accompanying it is a liquid rill of treacle:

"He studies, struggles, night and day,
For he must work while others play.
For science's sake—to do his part—
He crushes feeling from his heart:
In clinics or dissecting hall
A man should have no heart at all
Save one of steel. He graduates;
And then, for weary years, he waits"—

the young graduate can supply the rest from his own experience, if not now, pretty soon. We see him next at the bed-side of a very high-toned patient; then driving home through a furious rainstorm, but with a horse and chaise in keeping with the dignity of his calling; the high-toned patient recovered, joins with her husband in depreciating his service—

"They hem and haw and discuss the bill,
And both conclude she was not so ill"—

he is called from the theatre by a messenger, just as the play is at its best moment; he percusses, vaccinates and prescribes at Castle Garden; then—

"On battle-field, 'mid shot and shell"-

he is seen at a safe distance doing his best for the wounded Lastly and truly, he is represented as being interrupted in his cozy office by a drummer, but as he represents *Maltine*, he can only smile and welcome him.

PROF. KEEN says that in cases of Profound Shock the best drug that can be given is sulphate of strychnine. Give a hypodermic injection of one-thirtieth of a grain.—Col. and Clin. Record.

PROF. KEEN states that he has almost entirely abandoned Subcutaneous Operations, as by the modern methods of aseptic and antiseptic surgery the open operation is as safe, or safer, for the reason that the surgeon is able to see what he is doing.—College and Clinical Record.

PROF. COHEN says that after the Removal of Polypi from the nasal cavity by forceps or snare, the injection of distilled witch-hazel, one part to water four parts, three or four times a day, is much better than the application of the galvano-cautery.— College and Clinical Record.

IN SENILE PRURITUS, a German writer (N. Y. Medical Record) recommends sponging the body every night with warm water containing carbolic acid and vinegar, and the subsequent application of a powder consisting of one ounce of salicylate of bismuth and four ounces of starch.—Col. and Clin. Record.

ATROPINE IN HEMORRHAGE FROM THE LUNGS.—Dr. Stirling, says the Therapeutic Gazette, relates a case in which hemorrhage from the apex of the left lung was entirely uncontrollable by ergotin, and all the other remedies usually prescribed. He administered 1-150 grain of atropine, hypodermically, with the result that the bleeding was at once stopped. He found that when the drug was stopped the bleeding recommenced, to be controlled by a further use of the atropine.—Memphis Medical Monthly.

Antipyretics in Influenza.—Immense quantities are given this season, and we note that quinine is more generally associated with them than formerly. Phenacetin is still in the lead, although acetanilid, reinforced with quinine and strychnine, gives us a safe analgesic; or acetanilid with salicylic acid and extract uux vomica. For the rasping dry cough, opiates do not do well, but small doses of iodide of potassium, with carbonate of ammonia and camphorwater help wonderfully to liquefy the sputum, and give more breathing space. The inhalation of oil of turpentine from a cup of hot water, or of compound tincture of benzoin by inhalation, or

oil of eucalyptus, are very soothing in the laryngeal forms of influenza.

Lowenstein: "On the influence of various purgatives and of enemata upon the secretion and composition of bile."—The results of experiments were: (1) In large doses, none of the purgatives used (gamboge, jalap, aloes, rhubarb and cathartic acid, podophylotoxine) increased the biliary secretion; some (gamboge and podophylotoxine) lessened it. In small doses gamboge and podophylotoxine increased it. Enemata caused no increase. (2) The composition of the bile is little altered; large doses of gamboge lessen the amount of bile acids; rhubarb and small doses of podophylotoxine increase the coloring matter. (3) Absence of bile in the intestine lessens the purgative effects of gamboge, of jalap, and of podophylotoxine, and increases the effect of aloes and rhubarb.—Bulletin General de Therapeutique.

Hemorrhages in the New-Born.—(1) Hemorrhage in the new-born is, in nearly all cases, an acute transitory affection, beginning within the first week or ten days of life, and lasting from one to six days. (2) The etiology of this form is perhaps best explained by the infectious theory. (3) In very exceptional cases the disease is due to true hemophilia, as it is seen in older children and adults. In a small number of cases it is one of the symptoms of syphilis or septicæmia. (4) The mortality from all forms is about 75 per cent. (5) Treatment should be guided by the knowledge of the transitory, and, perhaps, infectious character of the affection, as it is seen in the majority of the cases.—Townsend in Boston Medical and Surgical Journal.

PIPERAZANE.—The introduction of piperazane, the new uric acid solvent, is proceeding most enthusiastically. Reports from European sources—Germany, France, England, Italy, etc., where the remedy has been extensively tried during the past six months, are now appearing in continuous round, and all in the most flattering terms. In the United States, where the first supplies were received in October, 1891, confirmatory trials have hardly had time to be concluded, but good reports of the preparation may shortly be looked for from authorities in Boston, New York and Philadelphia. Piperazane should be prescribed for continuous treatment, 1 gramme

per day, dissolved in a quart or more of water—perfectly areated—which the patient is to drink in wine-glassful doses, at frequent intervals. The water should not be kept cold, but at a moderate temperature, about 60° to 70° F. Piperazane will dissolve (i. e., unite with) twelve times more uric acid than will lithium, and the resulting urate salt is seven times more soluble than urate of lithium.—Notes on New Pharmaceutical Products.

Local Chloroform Anæsthesia.—In the Medical Press for November 18, 1891, a correspondent reports the following method of producing local anæsthesia: "During the past winter I removed a small tumor from the hand of a nobleman in Rome, having first frozen the part by means of chloroform applied by spray. Unwilling in this case to administer it internally, and anxious to try its effect externally, I sprayed his finger for about ten minutes with chloroform. Before commencing the operation the finger became quite cold, and felt like a piece of ice. The removal of the tumor subsequently was not felt by the patient. The chloroform did not produle any effect on the circulation, nor on the nervous system. The operation lasted about five minutes, the patient declaring he felt nothing. I drew the cut surfaces together with silver wire, which I removed on the fifth day, the part healing by first intention under carbolic acid lotion.—Therapeutic Gazette.

PHENOMENA OF LIFE AND DEATH -The necrology of the old year, which ended but a short time ago, will be read by thousands with mournful interest. In perusing these sad records the mind unconsciously reverts to the well-known axioms, which tell us that the average human life is a span of but thirty-three and one-third short years. That one-quarter of all born die before they have seen the opening of their seventh year; one-half before reaching seventeen; so that those who pass their "teens" enjoy a felicity unknown to one-half the human species. In every thousand persons only one reaches the age of 90; in every one hundred only six reach to or beyond the age of 65, and not more than one on an average i five hundred lives to be 80 years old. There is said to be upwards of 1,000,000,000 human beings on the globe; of these one-third die every year, 91,824 every day, and 3,730 every hour, or 60 every minute. Married men are said to live longer than single ones; tall men longer than short ones. Women have more

chances of life in their favor previous to the fiftieth year than men have, but fewer afterwards.—Notes on New Pharmaceutical Products.

A LESSON FROM THE UNITED STATES ARMY MEDICAL DEPART-MENT.—Every medicine used by the United State. Army Medical Department is examined by an expert chemist before it is purchased. Twice a year the Surgeon General advertises for proposals for supplying the Army with medical and hospital supplies. This advertisement compels bidders to submit samples of their goods for examination. When received, these are stripped of every label or mark by which their makers could be recognized and placed in the hands of the Army chemist, Dr. W. M. Mew. Thus he is enabled to examine every sample unbiased by the name of the manufacturer. By the results of this examination the bids are accepted or rejected. After the goods are received by the department, a set of samples is again sent to Dr Mew to determine whether the goods are equal to the sample first analyzed. A writer in the Pharmaceutical Era, from which we have taken these facts, says that samples of the same article often exhibit great variation. Thus the chemist pointed out five samples of the same drug, one of which was forty-four times stronger than the lowest. These were samples of nitre, and had the lowest lot been purchased by the Department, the Army surgeons would have wondered at the lack of results from their prescriptions of nitre. This system has had the effect of furnishing the Medical Department with the best goods Army surgeons are the only ones who can be sure of the quality of every drug that they prescribe. Dr. Mew's work has often been revised by other chemists because of the disputes over his decisions by the contractors, but during the seventeen years he has been on duty his reports have never been thus shown to be inaccurate. In this record he takes a pardonable pride. From the numerous samples of medicines found far below the standard, it is clear that the medical profession outside of the Army must have many prescriptions filled with drugs very deficient in quality. In the present state of things how can a physician know whether he is prescribing what he desires? If the nitre submitted to the Army chemist varies from one to forty-four in quality, how shall the doctor tell which of these strengths goes into his prescription?

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The physician is not an analytical chemist, nor even a pharmaceutical chemist, so that he cannot settle the strength of his drugs by his own skill. He may estimate the strength of a certain preparation by the effects upon a given case. True, but the patient may die from lack of the proper medicine while he is thus experiment ing. Besides, when he has settled one bottle another may be placed in stock of a different strength Two courses lie open to him. One is to have as his friend a skilled pharmaceutical chemist, who shall test every sample of drug for him and his other customers. and thus place the doctors patronizing his place of business in a position identical with the Army physicians. Such men are hard to find in the retail drug trade, but when they are found they are simply invaluable to the physicians of their acquaintance. The other alternative is to ascertain, as best one can, the manufacturers that are the most competent and honest, and habitually prescribe their products. It were, however, preferable to have one's own chemist to do all this work for him, so that prescriptions may not fail of their expected effects owing to defects in the quality of the drugs administered -American Lancet.

THE FIRST RAILWAY TO JERUSALEM,-The first railway to Jerusalem will, we are told, be opened in the spring of the coming year. It is a short line, running from Joppa, the nearest port on the Mediterranean, and intended to accommodate the growing passenger and other traffic between that place and the Holy City. The work of construction is being carried out by a French company, who began laying the line in April, 1890. It is fully expected that the speculation will be a paying one. The company anticipates, at all events, making large profits, after paying the shareholders a guaranteed interest of 5 per cent. It is stated that over 40,000 persons land at Joppa every year in order to make a pilgrimage to Jerusalem and other spots celebrated in sacred history. The number of steamers and other vessels putting into the port of Joppa is now upward of 800 a year, the destination of most of the passengers and merchandise they convey being the capital of Palestine. In evidence of the recent rapid growth of the traffic, it may be mentioned that Joppa has trebled its population within the last thirty years. Tourists will be able to take a return ticket from the port in question and Jerusalem for 20 francs, and what is more,

they will be able to do the journey in a far shorter time with infinitely greater safety than hitherto. The rush of tourists from all parts of the civilized world to Jerusalem will, if the expectations of the promotors are fulfilled, be something phenomenal in the immediate future.—Medical Review.

BARTRAM'S GARDEN.-The city of Philadelphia has, owing mainly to the exertions of Mr. Meehan, succeeded in obtaining possession of almost the first botanic garden founded in the colouies. It was planted in 1720 by John Bartram, then only 19 years of age. who was a most enthusiastic botanist and student. His son William, who was born at the garden in 1739, was as greatly interested in all that related to plants as was his father. In addition to the work of the farm, which they owned, both found time to collect such plauts as made the garden famous and unrivaled. The elder Bartram died in 1777, aged 77, but the work was energetically continued by his son William. The latter, among other accomplishments, had a considerable love and talent for drawing. He traveled constantly, and published accounts of his wanderings. He died, unmarried, in 1823, in the eighty-fifth year of his age, having retained his faculties to the end. A few minutes only before his decease he had penned a description of some favorite plant .- Pharmaceutical Record.

Peroxide of Hydrogen in the Treatment of Puriform Cavities and of Fistula.—Dr. H. Graff, a military surgeon of Christiana, publishes in the Norsk Magazine the result of his exerience of peroxide of hydrogen in the treatment of abscesses which do not admit of being laid completely open so as to subject them to antiseptic treatment, and of fistulous sinuses offering the same difficulty. The author recommends, in preference to all other antiseptic fluids, irrigation with a 15-volume solution of peroxide of hydrogen, which he employed with the greatest success at the Royal Hospital of Christiana. The great development of gas which takes place in consequence of the decomposition of the peroxide when coming in contact with blood or pus, removes the pus very effectually. The irrigation, followed by proper antiseptic dressing, causes a considerable decrease of the discharge, and healing takes place in a remarkably short time. In the case of cachectic

patients, when granulation is slow. Dr. Graff recommends that the irrigation should be occasionally changed for injections of balsam of Peru and ether. The treatment is especially valuable in cases of indurated wounds with puriform cavities. It is, of course, necessary to make due provision for rapid and free drainage, as the development of much gas may otherwise produce serious pressure.—

Journal of the American Medical Association.

READING NOTICES.

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Cop-Liver Oil and Creasote in Consumption.—Dr. Julius Summerbrodt, Professor at the University of Breslau, has recently published his experience in the use of creasote in consumption. He states: "After nine years employment of creasote, in thou sands of cases of consumptive patients, I have reached the conclusion that we can cure with creasote sufferers in the initial stages of lung tuberculosis, and not only the initial stages, but also longer-seated and severer forms may be completely and permanently cured. Creasote is for countless sufferers an excellent remedy, thus far unequalled by any other for tuberculosis of the lungs. I consider the most desirable form for administering creasote to be the capsule, adding a readily-absorbable fat, as cod liver oil or olive (il.")

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JACKSON & BELL, PUBLISHERS.

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PULMONARY

CONSUMPTION

(THE TREATMENT BY THE SHURLY-GIBBES METHOD.)

THE experiments and results, obtained by Heneage Gibbes. M. D., Professor of Pathology, Michigan University, and E. L. Shurly, M. D., Professor of Clinical Medicine and Laryn gology at the Detroit College of Medicine, in the treatment of Pulmonary Consumption with solutions of chemically pure iodine and chloride of gold and sodium are already well known to the Medical Profession.

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M.D.,
GEO. GILLETT THOMAS, M.D.,

Number 2. Wilmington, February, 1892. Vol 29.

ORIGINAL COMMUNICATIONS.

ALBUMINURIA:

ITS RELATIONS TO SURGICAL OPERATIONS.

By J. W. Long, M.D., Randleman, N. C.

(Lecturer on Urinalysis in the School of Pharmacy, Trinity College.)

By albuminuria is meant an expression on the part of the kidneys that something is wrong; that the great excretory organs are more or less damaged, and not doing their whole duty. I am well aware that this "free translation" is open to criticism; that the mere presence or absence of albumin in the urine is not always a crucial test by which we may estimate the condition of the kidneys; but, taken in connection with the physical properties of the urine, it is a symptom of far-reaching significance. It is also desirable to know how much urea is being excreted, and whether or not casts

are present, but this is not always practicable, and we are often forced to rely on the albumin tests and the physical properties of the prine.

We will discuss the relations of albuminuria to surgical operations under the following heads:

- I. Does an operation ever induce albuminuria in healthy kidneys
 - a. Through the influence of the anæsthetic employed?
 - b. By the operation, per se?
- II. Does albuminuria increase the dangers of
 - a. The anæsthesia?
 - b. The operation, per se?
- III. Does an operation ever relieve albuminuria
 - a. By overcoming the condition for which the operation was done?

As most operations are done under anæsthesia, the question before us cannot be intelligently studied without considering the influence of anæsthetics; however, there will be no attempt to discuss anæsthetics except as they affect the kidneys. Let us first notice the effects of ether on—

- 1. Healthy kidneys.
- 2. Diseased kidneys.
- 1. There have been a number of experiments and observations made to determine the effects of ether on the kidneys. One of the latest papers bearing on this point is that of Dr. Robert F. Weir (New York Medical Journal, March 1, 1890). After reviewing the literature tending to show that ether injuriously affects the kidneys, he notices the elaborate paper of Dr. Feuter, of Berne (Klinische und experimentelle Beobachtungen über die Aerthernarkose, 1888), in which paper are reported 150 clinical and 13 experimental observations on ether narcosis. Dr. Feuter speaks of the so-called "American warning"—the danger of the kidneys. Six dogs whose urine was free from albumin, were etherized for an hour and a half to three hours; in none of them was the slightest trace of albumin developed, although in four the ether was purposely pushed until death ensued. Feuter concludes from his 150 cases and 13 experiments: "That ether has no perceptible effect

upon the healthy kidneys of animals, who, moreover, are more susceptible than mankind to its influences."

Weir cites 35 cases occurring under his own observation—1 case (of etherization) lasting nearly an hour without operation, and 34 cases for various operations other than in the abdominal or genitourinary regions; these regions are excluded because an operation in these parts is liable to cause albuminuria irrespective of the anæsthetic, as we will notice presently. The 35 cases were free from albumin before etherization, while only 9 showed a transitory trace afterward, 26 presenting no change, either chemically or microscopically.

Dr. H. B. Millard, in a personal communication, says he does not think an anaesthetic can produce albuminuria in perfectly healthy kidneys.

2. There is an opinion prevalent among surgeons that while the safety of ether is admitted when the kidneys are healthy, yet if there is reason to suspect nephritis, ether is strongly contraindicated. Dr. Gerster voiced this sentiment in a paper read before the New York Academy of Medicine in 1887; but there has been considerable reaction since then, and I understand that even in Dr. Gerster's hospital (the German Hospital, New York) ether has superseded chloroform.

Feuter gives 4 cases, the subjects of albuminuria when etherized: 1 for diagnosis, 1 for exsection of the hip; 1, a five-month's old baby, with abundant albuminuria from previous scarlatina; 1, the subject of tuberculosis, etherized three times, and whose kidneys showed at the post-morten at a much later period tubercular deposits and amyloid changes. In none of these cases was there an increase of the albumin, and in the case of the child there was an actual disappearance on the day of the operation and for three days thereafter. Feuter states that he has never observed any increase of albumin or other symptom which would lead him to suspect any advance in the kidney lesion, either during or immediately after an etherization. He therefore concludes that "ether is not dangerous in persons whose kidneys are only slightly diseased," and that "subsequent disturbances of the circulation in the kidney, when met with, are very transitory and rapidly disappear."

Weir gives 5 cases with albumin before etherization, 3 of which

showed no increase of albumin afterward, while in 2 there was a slight increase, but no unpleasant symptoms developed.

Much more extended observations must be made before this question is definitely settled, but there is reason to believe that the dangers of ether as regards the kidneys have been magnified.

The cases given in the well-known papers of Dr. Emmet in 1872, Dr. Turnbull in 1880, Dr. Norris in 1881, Dr. Carpenter in 1886, and Dr. Millard in 1887, all given to show the injurious effects of ether on the kidneys, are, most of them, open to the objection that possibly other influences than the anæsthetic might account for the renal disturbances. These influences will be noticed later.

The effects of chloroform on-

- 1. Healthy kidneys.
- 2. Diseased kidneys.

The literature on this point is singularly scarce. However, it may be stated in general terms that chloroform is understood to have little effect on the healthy kidneys, and even when advanced organic (renal) lesions are present, chloroform may be used with comparative safety, certainly with less risk than other. But of late there seems to be a tendency to question the safety of chloroform as regards the kidneys. Wood (Therapeutics, p. 321) says: "Chloroform is undoubtedly, at least in part, eliminated as chloroform with the breath, also with the urine. Fubini found it in the urine five hours after its inhalation. Albuminuria has been noticed in animals and man after chloroform narcosis."

A Russian physician, has recently observed the effects of chloroform on the kidneys in 50 operative cases. All the cases were free from albumin before operating, while 19 showed this symptom after operating.

In a lecture at the New York Polyclinic two years ago, the writer heard Dr. John A. Wyeth discuss the relative merits of chloroform and ether, on which occasion he cited many cases of renal complications occurring after chloroform narcosis.

I have lost 2 cases after using chloroform—1 from acute nephritis and 1 from suppression; but as in one an operation for hemorrhoids was done, and nephrotomy in the other, I am inclined to attribute the fatal results to the operations rather than the anxiety thetic, for special reasons, as we shall see presently.

Dr. Millard (Medical Record, January 29, 1887) says: "Chloroform, as regards its effects on the kidneys, seems safer than ether. However, I do not regard the use of chloroform in chronic nephritis absolutely unattended with danger."

In deference to the prevailing sentiment, it has been my custom for some years to use chloroform when I had reason to believe the kidneys were diseased; but I must confess my experience with this agent and the study incident to the preparation of this paper causes me to doubt very seriously the correctness of this practice.

We now come to the proper consideration of the question:

DORS AN OPERATION, PER SE, EVER INDUCE ALBUMINURIA IN THE HEALTHY KIDNEYS?

That albuminuria sometimes follows an operation cannot be doubted. In approaching an operation we are in the habit of giving due weight to the dangers laid down in the text-books as common to all operations, namely: shock, hemorrhage and sepsis, while I fear we are prone to overlook the dangers that might arise through the kidneys. Every surgeon can recall cases which reacted well from the operation, had no hemorrhage-in a word, were doing all right, when perhaps at his next visit his attention was called to a lessensd flow of urine, which, on inspection and analysis, proved to be turbid, smoky, of high specific gravity, and more or less albuminous. Prompt measures may relieve this condition, but the severer cases pass from bad to worse, ending fatally. I have learned to analyze the urine both before and after an operation. A point worth remembering here is, to inquire whether or not your patient sleeps well at night, or if his sleep is disturbed by dreams or delirium, for often I have found this condition associated with retention or suppression; on the other hand, a patient may be very quiet and apathetic in the presence of profound renal disturbance.

Trouble arising from the kidneys may be illustrated by case from practice:

R. P. D., aged 38 years, had always enjoyed good health except for the last few years he had suffered from hemorrhoids; he also had a stricture, which gave him no trouble except when the hemorrhoids were troubling him. He was a very large man, weighing about 220 pounds, and had a large business on his hands. Six

months before operating I examined him for life insurance, and found nothing abnormal about his urine. There was no urinalysis made just before operating, as I felt sure his kidneys were doing good work. Under chloroform narcosis the largest tumor which was muco-cutaneous, was incised around the base, transfixed with a double silk ligature, tied in halves, and trimmed off with seissors. This was on Monday; on Wednesday it became necessary to use the catheter, and at regular intervals thereafter. On Saturday he had a rigor; on Sunday a much harder one, followed by continuous fever, reach in the p. m. 102° to 104°, with pain in the back, scanty flow of highly albuminous urine (40 per cent. bulk), and death on Wednesday night, ten days after the operation. Both Dr. W. A. Woollen, who was in constant attendance, and Dr. R. L. Payne, Sr., the consulting physician, attributed his death to the nephritis.

Another case in point is that of-

J. B., aged 51 years, seen by courtesy of Dr. J. O. Walker. He had been sick seven weeks, with symptoms referable to the left lumbar region; he was passing in twenty-four hours eight ounces of urine, loaded with urates, which showed only a faint trace of albumin; the specific gravity was 1029, and the nitric acid test by the contact method gave the characteristic reaction for nitrate of urea. A diagnosis of pyonephrosis was made; and, with full aseptic precautions, nephrotomy was done by the vertical lumbar incision. Pus was found in the kidney substance, the cavity irrigated, and drainage established. Chloroform was employed, and not more than three drachms were used. I never saw a patient react better; be came from under the anæsthetic perfectly rational; pulse 80, and temperature 98°. During the first twenty-four hours only seven ounces of urine were excreted; this was drawn by catheter, and tound to contain less urates, but 20 per cent. of albumin. After this time only one ounce of bloody urine was made, the patient dying at the close of the fourth day of suppression of urine.

Albuminuria as the result of an operation may be brought about in two ways, namely:

- 1. By reflex action.
- 2. By sepsis.
- 1. That disturbance of function, and even organic lesion, may be

produced by morbid reflex action, is an admitted fact, and often observed. A case showing how the kidneys may be thus affected came under my observation about four years ago, by courtesy of Dr. Woollen:

H., aged 7 years, complained of pain and soreness in ileo-cæcal region, had some fever, and was confined to bed. There was complete suppression of urine for three days, the catheter being repeatedly used without getting any water. Appendicitis was diagnosed and preparations for an operation made. Some delay occurring, the father, without our knowledge, gave one teaspoonful of Frey's vermifuge, which contains Jerusalem oak; the next morning the boy passed by the bowel a ball of lumbricoid worms, which the father untangled and counted to contain sixty worms. Within twelve hours after discharging the worms the boy passed unaided six or eight quarts of urine. He speedily convalesced.

Peyrani (Flint's *Physiology of Man*, vol. iii, "Secretion," p. 28, et. seq.) has shown that the sympathetic nerve has a remarkable influence over the secretion of urine, galvanization of these nerves increasing the amount of urine and urea, while section of them causes both urine and urea to sink to the minimum.

Bernard proved long ago that albuminuria can be produced by puncture of a certain spot in the floor of the fourth ventricle.

Edes (Pepper's System of Medicine, vol iv., p. 40) says: "Lesion of the cerebral peduncles, section, destruction or irritation of the spinal cord and irritation of the renal nerves, are also causes of albuminuria."

Millard (New York Medical Journal, May 9, 1891), p. 527) quotes from an interesting paper presented to the Paris Academy of Sciences, by Drs. Arthaud and Butte, on "Neuropathic Albuminuria." This type of albuminuria is characterized by preëxisting and coexisting symptoms in the viscera enervated by the pneumogastric nerve. The irritation to the pneumogastric in these viscera is reflected through the vasomotor system to the kidneys, causing albuminuria and nephritis.

It seems needless, however, to cite further proof that albuminuria can be induced by reflex irritation, but I wish to call attention to the fact that this condition is very much more likely to occur after operations in certain parts of the body than in others. This is specially true of the abdominal and genito-urinary regions, which

is readily explained by the anatomy and physiology of the sympathetic nervous system in these parts. The solar plexus, or "little brain," presides over the abdominal and pelvic viscera, the connection with the kidneys being very close through the medium of the renal plexus, which is formed by filaments from the solar and aortic plexus, semilunar ganglia and lesser splanchnic nerves. From the renal plexus fifteen or twenty filaments, with numerous ganglia developed on them, pass into the substance of the kidney with the arteries (Gray's Anatomy and Flint's Practice, loc. cit., vol. iv). The intimate and rich supply of every part of the parenchymatous and circulatory system of the kidneys is ably shown in a paper by Dr. Holbrook on "The Termination of the Nerves of the Kidneys," read before the American Society of Microscopists, and given in Millard's work on Bright's Disease. According to him the nerves supplying the kidneys are mainly of the non-medullated variety, sometimes surrounding the arteries in bewildering number, encircling them around, above and below, freely branching, bifurcating, and supplying all the neighboring formations with a large number of delicate fibrille, a plexus encircling every tubule; supplying the connective tissue extending into the layer known as the membrana propria, and even piercing this membrane and penetrating into the epithelia and the cement substance between them; the nerves also give off delicate ramules to the afferent vessels, by which they enter the tuft and produce a delicate plexus spun around the capillaries. The distribution of nerves is richer in the convoluted and narrow than in the straight collecting tubes." Therefore we can easily see how any irritant to the abdominal or pelvic viscera might be reflected to the kidneys, disturbing their functions, and, if continued, produce organic lesions.

Our fellow-member, Dr. Engelmann, in an excellent paper entitled "Renal Disease Following Utero-Ovarian Lesions," read before the American Gynecological Society, 1889, says: "Functional derangement, and, finally, morbid changes, are produced by nervous influence emanating from diseased pelvic viscera: (1) As reflex phenomena, or (2) by perverted nerve action by the secretory nerves due to the intimate connection of the uterine and renal plexus." Further, he says: "Suppression of urine occurs as a reflex, more generally speaking, hysterical symptom, and may lead to pyelitis, a mild nephritis, or hydronephrosis" After citing a case of nephri-

tis following spasmodic stricture of the urethra, he says: "I believe such cases to be more frequent in connection with pelvic disease than we may suppose, as the slight symptoms produced are overlooked amid the varying pains of the primary disease."

Weir (loc. cit.) says: "It may be stated at this period-and in this I think surgeons will agree—that it is well known that any operative procedure with or without an anæsthetic, upon the genitourinary tract, is apt to be followed, from septic or mural influences. by renal complications. An objection can also be raised against the renal cases reported as occurring after laparotomy, because it has been fully established by the researches of Englisch and others, that such traumatisms are prone, through the influence upon the solar plexus, to beget albuminuria." He gives a case of gastroenterostomy, done for simple pyloric stenosis, to illustrate the influence of an abdominal operation. Prior to the operation repeated analysis of the urine failed to discover either albumin or sugar, but within forty eight hours after operating & of 1 per cent. of albumin and 4 per cent. of sugar were found in the urine, also granular and epithelial casts. These all disappeared within forty-eight hours thereafter. During the operation the hand encountered and recognized the pancreas and left kidney; this, or possibly some contact wit solar plexus, Dr. Weir thinks, would readily explain the transitory albumin and sugar.

We are all familiar with the disturbance that occasionally follows the simple passing of a catheter [Professor W. T. Briggs relates a fatal case occurring after this simple operation] or sound. Now, excepting those cases due to sepsis, I believe this so-called "urethral fever" is nothing more nor less than a reflex disturbance of the kidneys, sometimes of the most trivial nature, sometimes amounting to complete suppression, or acute nephritis.

2. Nephritis may follow an operation as the result of septic influences.

Senn, in his great work on the *Principles of Surgery* (p. 327), says: "If septicemia follow an operation or a severe accident, it is sometimes almost impossible to decide whether the pronounced loss of strength should be attributed to shock, the anæsthetic, or the beginning of an attack of septicæmia." The same is true of nephritis following an operation; but, reasoning from analogy, a careful elimination of the influence of the anæsthetic employed,

and the testimony of clinical cases, we can easily demonstrate the occurrence of nephritis as a result of septic poisoning.

The albuminuria complicating the infectious diseases (as diphtheria) is believed to be a septic process, due either to the specific germs present or to ptomaines produced by them. (Stewart's Lectures on Albuminuria, p. 129; and Keating's Cyclopedia of Diseases of Children, article on "Diphtheria.")

Dr. Matthews Duncan (Stewart, loc. cit., p. 127), gives 16 cases of uncomplicated parametritis, in which 6, or $37\frac{1}{2}$ per cent. had albuminuria, the albumin gradually disappearing as convalescence was established; and it appeared to be more frequent in cases that went on to suppuration.

Weir says: "Is it not possible to explain the development of important symptoms in those who not only have evidence prior to an operation, but in those who have no evidence of disease prior to an operation, by the presence of a septic process—surgical fever or septicæmia, as you may prefer—originating in the wound? In other words, how little of a septic process is necessary to choke up the kidney?" I am inclined to believe that the renal risks that happen from time to time to a patient undergoing an operation come not so much from the anæsthesia as from the septic processes which are so often encountered, even in a well-carried-out antiseptic operation."

It is stated that operations about the mouth and rectum are specially liable to produce septiciemia. The hemorrhoid cases given above, and which ended fatally by nephritis, probably belongs to the class due to sepsis.

DOES ALBUMINURIA INCREASE THE DANGERS OF OPERATION?

It having been shown that an operation may produce renal complications in healthy kidneys, particularly when done in certain regions, it naturally follows that the preëxistence of albuminuria would augment the dangers incident to an operation. Apart from the rôle a partially crippled kidney might play in producing more extensive lesions, the local trouble, even though limited in extent, would certainly be liable to act as a hindering cause in the elimination of poisonous substances, especially when the amount of such substances, whether those normally excreted, as urea, or produced

by disease, as ptomaines, be greatly increased. Again, it is well known that the brunt of any shock or exposure falls usually on the "weakest part."

However, it is not pretended that albuminuria, minima or maxima, always gives trouble as the result of an operation; but I do mean to say that albumin in the urine indicates a condition of the kidneys which imposes an additional risk to any operative procedure. Clinical experience bears out this assertion.

Dr. Millard (in a personal communication) says: "I have known surgeons to attribute uramic symptoms and renal congestion, following an operation, to the shock; I have believed, however, that in such cases as I have seen renal difficulty or albuminuria preëxisted. In mild albuminuria, where the kidneys are perfect in their excretory functions, the risk need not be great; albuminuria must, however, add scmething, and sometimes a great deal, to the risk."

I take it that it is hardly necessary to cite many cases or opinions on this point, so I shall refer to only one case, and the opinion of the distinguisued surgeon who operated. As is well known, the Emperor Louis Napoleon died January 8, 1873, after the second lithotrity at the hands of Sir Henry Thompson. The post-mortem revealed advanced kidney disease. A short while after this, in a clinical lecture on the "Influence of Renal Disease on the Choice of an Operation for Stone in the Bladder," Sir H. Thompson said: "I never operate for stone without first ascertaining the condition of the urine; so that if I undertake an operation for a patient manifestly the subject of renal disease, it is in full view of that fact, and because it may be absolutely necessary that surgical relief must be attempted at all hazard." (Lancet, 1873, vol. i., pp. 58, 113, 331; vol. ii., p. 624.)

DOES AN OPERATION EVER RELIEVE ALBUMINURIA BY OVERCOMIN®
THE CONDITION FOR WHICH THE OPERATION WAS DONE?

While an operation may produce albuminuria, and while an already existing albuminuria may greatly increase the dangers of an operation, we have abundant proof that an operation is often the means of speedily abating a pronounced albuminuria. This can be true only of recent albuminurias, such as that complicating strangulated hernia and acute sepsis.

Dr. Frank Stewart (loc. cit., p. 128) cites 22 cases of strangu-

lated hernia with marked albuminuria, in all of which operation was done, when the albumin disappeared or began to diminish, and was all gone in three days.

I operated on a man this year for strangulated hernia, in whom twelve inches of the bowel was found to be gangrenous, and whose urine, which was scanty, contained 25 per cent. albumin (bulk) immediately before operating, and only 7 per cent. in the first water passed after operating—about four hours. The amount of urine increased from day to day, while the albumin diminished to a mere trace in a short while.

In February last I did an external urethrotomy without a guide on a bright mulatto man with stricture, retention, urinary extravasation, a high degree of sepsis and 30 per cent. of albumin in his urine. The albuminuria rapidly disappeared after the operation.

CONCLUSIONS.

The conclusions of this paper may be briefly stated as follows:

- 1. That neither ether nor chloroform rarely ever injures healthy kidneys.
- 2. That when renal disturbances from the use of an anæsthetic, the kidneys being healthy, do occur, they are due rather to prolonged narcosis, exposure of the patient, or perhaps to the combined influences of the operation and the anæsthetic.
- 3. That a mild degree of albuminuria or nephritis, especially if recent, is not a contra-indication to the use of chloroform or ether.
- 4. That even in the presence of advanced and extensive renal changes an anæsthetic may be employed, provided the patient or family are advised of the additional risk.
- 5. That of the two anæsthetics usually employed, it is yet a mooted question as to which is the safer, so far as the kidneys are concerned, unless it be in obstetrical operations.
- 6. That, while it is by no means the rule, profound functional disturbance, and even organic lesions, may be induced by an operation, apart from the influence of the anæsthetic.
- 7. That such renal changes are due to reflex sympathetic action, or sepsis, or both.
- 8. That operations in certain regions, notably the abdominal, genito-urinary, about the mouth and rectum, are specially liable to produce renal complications.

- 9. That a healthy condition of the kidneys minimizes, but does not obviate, the dangers referred to
- 10. That albuminuria is always indicative of renal lesions, and should be regarded with distrust, but is not a positive contra-indication to an operation.
- 11. That when albuminuria is associated with other evidences of advanced renal changes, no operation should be undertaken without first candidly stating to the patient or friends the dangers incident to the condition of the kidneys.
- 12. That, paradoxical as it may seem, an operation will sometimes relieve an albuminuria due to acute affectious.
- 13. That no surgeon is justified in undertaking an operation without first knowing the state of his patient's kidneys.

I am fully conscious of the fact that this imperfect paper contains many statements and errors which invite criticism; but the sacred writer hath said: "Iron sharpeneth iron;" so it is for the very purpose of provoking a discussion that this subject has been classified as above and brought before you to-day. I would not underrate the dangers of anaesthesia; I would not overrate the dangers of operations, nor would I magnify the importance of albuminuria, but this question, in all of its phases, is one of practical import, and every surgeon is liable to be called upon at any moment to answer some one, perhaps all, of the issues raised. Therefore I deem it not impertinent to ask a full and free expression of opinion by the Fellows of this Association.

THE NERVOUS AND MENTAL PHENOMENA AND THE SEQUELÆ OF INFLUENZA.

By CHARLES K. MILLS, M.D. (Read January 13, 1892.)

All practitioners have been struck by the prominence of nervous and mental phenomena in influenza; and much has been written, but mainly in a desultory way, about the symptoms of the disease which are referable to the nervous system, and its more or less persistent nervous and mental sequelæ. The part played by the nervous system in the etiology and history of the disease has been variously interpreted. One holds that it is a "nervous disease,"

without explanation; another describes it as a pneumogastric neurosis; another as a neuropathy due to ptomaine poison. According to Blocg, cited by Church (Church, Chicago Medical Record, 1891(, the primary infections action takes place upon the nervous system during the disorder, while sequelæ are to be attributed to secondary infection from ptomaines. Cheston Morris (Morris, American Lancet, March, 1891), of Philadelphia, advances the theory that the general symptoms of influenza may be traced to a derangement of function, or partial paralysis of the pneumogastric nerve, and that the affection is brought about by conditions of the atmosphere, which particularly tax the cardio-pulmonary apparatus which is regulated by this nerve, a view which, after all, relegates the disease to an atmospheric or infectious cause. Graves long ago referred the bronchial and pulmonary symptoms of grippe to lesions of the nervous power of the lungs, and Blakiston regarded it as a disorder of the nervous system, with concomitant derangement of the organs of digestion, circulation, etc. Levick (Amer. Journal Medical Sciences, January, 1864, and republication in pamphlet form, with notes of the influenza of 1889-'90), who cites the last two authorities, holds that certain symptoms are produced when the poison is expended on the sensorium, and certain others when its influence is chiefly exerted on the respiratory centres.

The analogies or relationships between influenza and other diseases generally recognized as belonging to the nervous system, either primarily or because of the situation of their most notable lesions, have been strongly brought out by able writers, as by Levick, for instance, who has even suggested that epidemic cerebrospinal fever, or cerebro-spinal meningitis, may be simply a malignant form of influenza, a view to which he was led because of the resemblance in the symptoms of the two diseases which differ in degree rather than in nature, and also because for three centuries the two have occurred coincidently or in close sequence.

Grasset and Rauzier (Leçon sur la Grippe de l'Hiver, 1889-'90; Montpelier and Paris, 1890; Monograph of 98 pages) lay great stress on the enormous predominance of the nervous over the catarrhal elements in the epidemic, as evidenced in the high fever, great cephalalgia, the marked delirium, the widespread pain, and the excessive nervous irritability. They refer to cases communicated by M. Coustan, in which the entire symptomatology of the

disease seems to have reduced itself to a horrible migraine. They review the literature which shows that writers of various countries are unanimous in proclaiming the importance of the nervous element—referring to Austrian, Russian, Belgian, German, English and Polish contributions. According to Schmitz (Allgemeine Zeitschrift für Psychiatrie und psychisch-gerichtliche Medizin, p. 179, 1891; cited in American Review of Insanity and Nervous Diseases, December, 1891), who read a paper on the subject before the Psychiatric Society at Bonn, influenza is a disease of the nervous system with secondary involvement of the heart, lungs and digestive organs. In several hundred cases which he observed the nervous symptoms were always primary, followed in every case by secondary involvement of the other organs.

What seems to be needed is an analysis and practical grouping of the facts, almost too numerous to handle, which shows the important part played by the nervous system in the development, progress and results of the disease. How is the nervous system affected by influenza? What are its primary or direct defects on the nervous system, and what are some of the more persistent and permanent impairments, and how are these determined by the disease? What are its acute nervous and mental phenomena, and what are the most common sequences? What is the probable pathology of these states, and what treatment is best in view of the neurotic characteristics of the affection?

The briefest consideration of the subject brings forcibly to mind the fact that all diseases of infectious or toxic origin—epidemic, endemic, sporadic or accidental—may strike any or all parts of the nervous system with a result which will be proportionate: first, to the virulence of the infecting agent; and, second, to the resistance of the individual, whether this is due to constitutional predisposition or to reductions the result of previous injury or disease. The microbes may differ, but a bond of union and close resemblance can be recognized between the effects on the nervous system of all contagious and infectious nervous diseases, as variola, scarlatina, diphtheria, measles, whooping cough, typhoid or typhus fever, leprosy, mumps, cholera, erysipelas, puerperal fever, influenza, or cerebro-spinal meningitis; of all of such constitutional and diathetic affections, as tuberculosis, gout, rheumatism and diabetes; and of all such toxic agents artificially introduced into the system,

These diseases, these diatheses, and these poisonous metals and gases produce, or may produce, nervous and mental phenomena of the same character, differing in degree in particular cases and for special reasons.

In all these affections at the time of acute outset, if the illness is of a serious character, such symptoms are present as great mental and pervous debility, irritability, restlessness, sleeplessness, or the opposite states of torpor, stupor, hebetude, or coma; delirium, vertigo or syncope; headache, browache, napeache, backache and limbache; pains of all degrees of severity referred to various nerve areas; hyperæsthesia of the skin, of muscle-masses, or confined to nerve-trunks or branches; spasms, local or general, and with or without unconsciousness; sometimes mental disturbance amounting to a true mania or melancholia. During the progress of such affections any one or several of these enumerated symptoms may be present. Supra-orbital pain, for example, may be the only prominent nervous symptom in a case of influenza; headache and backache in diphtheria; hyperæsthesia in mumps, diabetes, or gout, and mania in a case of puerperal infection. Any infectious or toxic disease may, in brief, produce the same symptom, syndrome, or train of phenomena; and, which is the main point, for the same reason, namely, because of the introduction into the system of an agent which directly and powerfully poisons nerve-centres, and possibly also nervous conducting tissues.

Following all infectious, diathetic, or toxic diseases, moreover, or directly springing from them, common experience teaches that we my have great nervous or general weakness; forms of insanity of the depressive type; paresis and paralysis of every grade, from an affection of a single muscle to that of all the extremities, and even more; localized spasm or cramp; general convulsions; pains in nerves, muscles and joints, and losses or perversions of sensation.

These symptoms and conditions, which may occur at the onset, during or after the subsidence of any infectious or toxic disease, are those which constitute the nervous features of the prevailing epidemic. I have introduced the subject in this way because it seems to me that it is this comprehensive grouping of generically similar phenomena which enables us to most readily grasp a subject even for practical purposes. We differentiate phenomena in our

daily labor, which we can only understand by properly grouping them and by referring them to a common or to related causes.

Any attempt to classify the nervous and mental phenomena of influenza must be attended with great difficulties. These are, in the first place, symptoms and conditions which, although manifested in non-nervous organs, are directly traceable to a nervous origin; secondly, affections which would be recognized by all as properly referred to the nervous system; and, thirdly, affections occurring in nervous tissues and organs, although, strictly speaking, not nervous diseases.

I will refer very briefly to the first of these classes, although of much importance. I will not, however, discuss the nervous origin of the fever of influenza, nor will I attempt to explain the catarrh, indigestion, etc., on some neurotic theory, as such a method might lead us anywhere, and for our present purposes would be unprofitable. I wish simply to emphasize the fact that some of the most prominent pulmonary, cardiac and vascular affections of influenza can best be explained on neural theories. Many personal observations have led me to the conclusion (not new) which has recently been well presented by Elliott (The Climatologist, vol. i, No. 1, August, 1891), of New Orleans, that the pneumonias of influenza are often due to vasomotor paralysis, that they are, in fact, forms forms of blood stasis or passive congestion from vasomotor paralysis, which in its turn is dependent upon the action of the infection upon the pneumogastric centres and the nervous system in general. A distinct difference can be made out between the true pneumonic lung and this "grip-lung," as it has been termed by Elliott. Graves long ago attributed the ædema of the lungs which occurs in influenza to an affection of the vagus.

"The grip-lung," according to Elliott, "has a long and very varying condition of passive blocd stasis unaccompanied by râles. If resolution occurs within three or four days, it is accompanied by large mucous râles, and no time is given for the slow appearance of bronchial breathing or bronchophony; but during the long continuance of the blood stasis an exudation occurs, increasing slowly, which will give, in time, some bronchophony and bronchial breathing, but never so complete as in pneumonia. Resolution never occurs in these cases with the suddenness that characterizes it in acute pneumonia. The condition passes off as gradually as it

formed. The sharp, clear-cut and sudden phases of the pneumonic attack separate it clearly from the obscure, irregular and slow phases of the grip lung."

Many disorders in various parts of the body are best explained on this theory of local vasomotor paralysis, although it is not necessary to attempt to force this explanation for all. Hemorrhages, minute, or even of considerable size, occurring in diverse localities, as in the retina, membrana tympani and internal auditory apparatus, or in the skin, or mucous or serous membranes anywhere, may be due to deficient vasomotor tonus. Brain, kidneys, liver or pelvic organs may suffer from forms of passive hyperæmia, subacute or chronic, which are in fact due to forms of vasomotor disorders of the extremities, such as flushed or pallid fingers.

Even trophic affections have occasionally been observed. Wilson (American System of Practical Medicine, vol. i., p. 870), for example, refers to gangrene of the lungs as one of the less common complications. Abscesses of the limbs have been recorded. Grasset records two observations of eschars occurring in young subjects in the absence of prolonged decubitus. The greater tendency in surgical cases to suppuration may have its best explanation in the depression of healthful vasomotor and trophic influence.

The peculiar forms of pulse and the uncertain or perverted action of the heart, extending in some cases to cardiac palsy and death, are in a strict sense nervous phenomena due to paralysis, partial or complete, of the inhibitory apparatus of the heart.

Let me take up those spmptoms and affections which would clearly be recognized as belonging to the nervous system.

I believe, with Church, "that the infection of influenza has a marked action upon the nervous system which may give rise to immediate acute manifestations or to remote and persistent conditions; and that, in the predisposed, grippe is competent to cause marked excitement or great depression of the motor, sensory and mental nervous apparatus."

Great nervous and mental prostration, both as an acute manifestation and as a persisting sequel, has engaged the attention and required the treatment of all practitioners. The mental depression often present as an initial symptom has been, in some cases, simply overpowering. Some of the patients are affected like individuals whose mental and motor centres have been poisoned to the limits

of human endurance, while still permitting the retention of consciousness. In other cases even consciousness itself has been over whelmed.

Not a few patients who suffered from attacks of influenza durin the early period of the present epidemic are still victims of profound neurasthenia. I refer now to cases which are not distinctively of the melancholic type. These neurasthenics are unable to endure a fair amount of work; their nervous forces are soon routed; they are weak, worrisome and unrecuperative. The cardiac weakness which has been left is undoubtedly in part the cause of this neurasthesia, and with reference to this Church says that "the persisting neurasthenic condition, which so usually follows influenza, is attributed by some to cardiac weakness of nervous origin, and this contention is not without weight, if it is observed that even after appetite, sleep, body-weight and physical functions have been long restored, the slightest exertion immediately produces disproportionate fatigue accompanied almost invariably by either a retarded or more frequently accelerated pulse, and rarely by præcordial distress, and even by angina pectoris."

Curtin and Watson (The Climatolog'st), whose experience in influenza has been enormous, say that although general nervous prostration often extended over long periods without any discoverable local cause, it was always worth while to examine the urine with care. "Sometimes a nephritis, sometimes a faulty digestion or hepatic inaction seemed to underlie the general condition in latent form. These cases, by enforced rest and attention to local complications, gradually recovered. These cases and nervous cases generally were very disappointing when sent to the seashore during convalescence."

Among the organic nerve diseases which have developed during the influenza or have been left in its wake, are in the order of their frequency, so far as my personal observation has gone, neuritis, meningitis, myelitis and cerebritis, or various combinations of these inflammatory affections, as, for example, concurrent neuritis and myelitis, meningo-myelitis, or meningo-encephalitis.

Probably no single affection of the nervous system has been so common during and after the grippe, and particularly as a sequel of the disorder, as neuritis. Almost every variety of neuritis as regards location and diffusion have been recorded, and have come

under my personal notice. Multiple neuritis, while not common, has not been rare; and I have seen a concurrence of this affection with poliomyelitis in the same case. Isolated neuritis of almost every cranial nerve has been recorded, with such resulting conditions as optic atrophy, loss of smell and of taste, ophthalmoplegias, both internal and external; oculo-motor, facial and bulbar, or pseudo-bulbar palsies of various types, including true pneumogastric paralysis. Several cases of specially located affections of the sympathetic ganglia or nerves have been recorded. Of the forms of local neuritis most common might be mentioned the supra-orbital, intercostal, sciatic and plantar.

An interesting case of neuritis with a myxædemoid condition of the limbs presented herself at the Philadelphia Polyclinic recently. She had a sharp attack of influenza five weeks ago, having been in good health up to that time, except five years since, when she suffered for several weeks with inflammatory rheumatism. On recovering from the influenza, the attack not having been especially marked with nervous symptoms, she was extremely weak in the legs, and was scarcely able to drag herself around. In a few days her feet and legs began to swell and to be painful, and soon became of enormous size and exquisitely tender. She has gradually improved, but still has a condition of firm swelling, which does not pit on pressure, from her knees to her ankles, and she also still has great tenderness on squeezing the feet or ankles, or in handling the nerves or muscles of the limbs. She has no cardiac affection.

The articular pain and other so-called rheumatic manifestations so numerous during and after attacks of the grippe, are, after all, best explained on the theory of infectious neuritis or myositis.

These cases with articular and other pains, and with swelling, recall the endemic or epidemic form of multiple neuritis known as beri-beri, in which the chief phenomena are ædema and paralysis of the limbs, with marked pain, hyperæsthesia and paræsthesia, followed later by anæsthesia, lost knee-jerk and depressed electrical reactions. Myositis certainly, and probably also periostitis, occur as complications or sequences of the influenza, and usually in association with neuritis of some type.

Many of the reports speak of the frequent occurrence of various neuralgias. Doubtless a distinction is seldom made by observers and recorders between neuralgia and neuritis, which are or may be separate affections. Practically these cases should be regarded as neuralgic, in which pain is referred to certain nerve lines or radiations; but in which pain on pressure, and the other phenomena of neuritis, such as anæsthesia, vasomotor as d trophic disorders and even paralysis, are absent. In my own experience the cases which could properly be diagnosticated as neuritis, are by far the most common. The distinctively neuralgic pains are probably due to toxemically depressed or exhausted sensory nerve-roots or centres in the cord and bulb.

Of diseases of the spinal cord proper, occurring as complications or consequences of influenza, the reported cases are not numerous, but they are none the less important. A few cases of myelitis have been put on record by native and foreign observers—one that I recall in which all four extremities were paralyzed. As would be expected in accordance with the analogies with other infectious and toxic diseases, anterior poliomyelitis is the most common type. I have had several cases of temporary paralysis of one or more limbs, which, owing to the absence of pain and of cerebral symptoms, were apparently spinal in their origin, and probably light forms of inflammation. Concurrent multiple neuritis and poliomyelitis has already been referred to as having been observed by me in one case in which the neuritis, which was not severe, soon disappeared, but a limited paralysis, evidently spinal in character, was left behind.

Several observers have reported cases of bulbar paralysis, and one striking example of this disease, attributed to the grippe, has come under my own observation, although exactly how far the influenza was responsible it is difficult to say. This patient, a clergyman, had a severe attack of influenza in May, 1890, and during its progress continued to work, and ate but little. In a very short time he noticed he was losing his power in his hands, which soon atrophied. In January, 1891, he began to have difficulties of speech, and, briefly stated, the case went on until November, 1891, when he was first seen by me; his symptoms were those of well-marked bulbar paralysis, with progressive muscular atrophy, chiefly involving the upper extremities.

In accordance with analogy, we would expect the occasional occurrence both of nuclear polioencephalitis, and even rarely Strumpell's cortical polioencephalitis. One or two of the few cases of probable polioencephalitis of the latter type have occurred in

patients suddenly stricken with fever, loss of appetite, and other symptoms which may have been due to infection.

Priester (Wien, med. Woch, No. 27, 1159; in American Review of Insanity and Nervous Diseases, December, 1891) has reported the case of a man 54 years old, who was taken with influenza in February, and in the beginning of March was seized with extremely violent headache, which resisted all medication, and later the patient became deeply somnolent, remaining in this condition for four weeks; he could be aroused, but was apathetic and soon slept again. Reflexes and temperature were normal; pulse from 40 to 60. patient had no paralytic symptoms, and slowly improved. His affection, according to the reports of the case, closely resembled Gerber's disease-paralyzing vertigo-although the latter is a disease of the warm weather. Tumor could be excluded by the absence of all focal symptoms a year before the attack. The most probable cause, he believed, was a pathological process, involving the central gray matter of the third ventricle, which would bring the disease into close relation with polioencephalitis of the nuclear type. Dr. G. J. Kaumheimer, who translated this report for the Review of Insanity and Nervous Disease, December, 1891, observed an exactly parallel case which originated in April, and lasted into July before recovery took place.

That meningitis, either cerebral, spinal or cerebro-spinal, occurs during the decline of the influenza cannot be doubted in the light of the evidence which has been presented by various observers, and particularly during the epidemic of the last three years. It is, however, a comparatively rare concomitant or complication. Some of the facts adduced as proofs of the existence of meningitis, and some of the cases reported as examples of the disease, are clearly instances of improper interpretation. The intense cephalalgia and rhachialgia; the atrocious pains variously localized in the face, trunk, limb-nerves, muscles or joints; the vigilant delirium, with hallucinations and delusions, sometimes assuming great gravity; the intense vertigo, with or without nausea and vomiting-these and other well-known nervous manifestations which are so prominent in many cases at the initiation of the disease, are not necessarily evidences of meningitis, or even of meningeal hyperæmia. Rather they are due to an overwhelming toxemia of the nerve centres and of the brain. Severe and terrible in character at first, they frequently pass away almost as rapidly as they came, which would not be the case if they were the evidences of a true meningitis. The enormous prostration which is left behind shows that the centres of nervous energy have been subjected to a depressing agency of great virulence, not that merely enveloping membranes composed mainly of fibrous tissue and blocd-vessels have been congested or inflamed. No reason could be given why such congestion or inflammation should leave such results.

The reports of cases terminating fatally because of meningitis, and even the reports, personal or official, of the frequent occurrence of this action, must be received cautiously, and sometimes incredulously. They are only to be relied on when confirmed by autopsies, or when from observers who are accustomed to closely differentiate the meaning of nervous symptoms, and particularly of pain.

It may also be worth while at this point to refer to the somewhat frequent diagnosis of chronic meningitis as one of the sequelæ of the disease. This diagnosis is usually made because of the presence of more or less persistent pain in or on the head. Experience has led me to believe that this pain is usually neuritic rather than meningeal. Even deep seated intra cranial pain does not necessarily indicate meningitis. They may be due to neuritis, just as certainly as a pain in the hand or foot. The fifth nerve has an immense distribution within as well as outside the cranium, largely to the dura mater, but also to other tissues and parts. It is a pathological possibility to have dural neuritis without a pachymeningitis, and this is the true explanation of some pains, both acute and chronic, which are present in other diseases as well as in influenza.

The form of meningitis most likely to be present in influenza is inflammation of the pia-arachnoid or soft membranes, now often designated lepto-meningitis. From observations corroborated by autopsies, I know that this affection may exist without pain; while pain of varying degree of severity, and usually intense, is practically invariable in pachymeningitis. Lepto-meningitis, however, is not usually without pain and hyperæsthesia as symptoms, but it may be absent, and its presence or absence will depend upon the location, extent, grade and complications of the meningitis.

While believing that these criticisms upon the sometimes hasty and the too frequent diagnosis of meningitis in influenza, and, indeed, in many other infectious and febrile diseases, are just, and can be sustained, it remains true that a genuine meningitis, sometimes of malignant type, may appear during the progress or closely following influenza. Some very competent observers have reported cases of this character, and in a very few instances the diagnosis has been confirmed by autopsies. The diagnosis should be made to hinge upon the signs and symptoms which would be satisfying as to the occurrence of meningitis from any cause; not alone on the presence of such phenomena as headache, vertigo and vomiting, but on such more convincing manifestations as optic neuritis and localized spasms or palsies, either cortical or of cranial nerves.

The fact that meningitis, and even the cerebro-spinal form, does occasionally occur in influenza, is by no means proof that this disease and epidemic cerebro-spinal fever are identical. It simply emphasizes the point with which I started, namely, that every infections or poisonous agent introduced into the economy may produce the same or similar pathological results in the nervous system. Largely according to the vulnerability, special or general, of certain tissues and organs, will be the preponderance of this or that form of so-called disease-for instance, of neuritis, myelitis, meningitis, cerebritis, or of combinations of these affections. All infections and toxic diseases give neuritis as the most common acute or chronic inflammatory manifestation, although myelitis, cerebritis and meningitis may occur. Even in cerebro-spinal fever, as I was perhaps the first to find out, multiple neuritis is a common complication; but the infection being virulent and overwhelming, we may not only have meningits, but even meningo-encephalitis or meningo-myelitis, with all their malignant phenomena and permanently disastrous results.

Vertigo is another symptom, like pain, often improperly referred to meningeal or cerebral inflammation. It is sometimes due to such disease, but occurring in influenza it may arise from other causes, as, for instance, from extravasations into the labyrioth or other portions of the auditory apparatus.

Müller (Berlin klin. Woch., No. 37, 1890; cited in American Journal of Insunity and Nervous Diseases, December, 1891) reports the case of a man 50 years old who, after influenza, presented great physical exhaustion. In a few weeks his mind seemed affected and he became somnolent, so that he could be roused only with difficulty and would then fall asleep again. In this respect the

case was much like the one reported by Priester. Pain upon pressure was present over the vertebræ, the neck was rigid, the pulse was small and irregular, the skin reflexes were diminished, and the tendon reflexes were absent. In two weeks he began to improve. The author believed the case was one of spinal cerebro-spinal meningitis, similar to that seen after infectious diseases.

Without entering into a discussion of their pathology or their peculiarities, I will briefly mention a few other forms of nervous disorders, occurring during or as apparent sequelæ of the influenza, examples of which have come under my personal observation. Convulsions have been reported by various observers, and in a few instances the convulsive habit has been established, and the patients have remained up to the time of report as cases of epilepsy. I have seen two such cases. Hystero-epilepsy and other grave hysterical phenomena have been initiated, or have recurred in cases in which the symptoms had long been dormant. Of local spasmodic affections I have seen no records, but one case of persistent clonic torticollis, with some pain and tenderness in the spinal accessory distribution, has been in attendance at the Philadelphia clinic. Two cases of facial paralysis, occurring immediately upon the heels of influenza, have come under observation.

Many affections not of, but occurring in, the nervous system, have been reported as complications or sequences of the influenza. These include such affections as apoplexy, due either to hemorrhage, thrombosis or embolism. One of my polyclinic patients, a man 37 years old, was attacked with influenza in January, 1890. He was not confined to bed, but suffered severely from headache, cough and persistent general weakness, and in February he was suddenly paralyzed in the right half of his body, and completely aphasic. Well-marked cardiac murmurs were present, and the grippe in this and similar cases is probably causative by lighting up old endocardial trouble, or through the blood dyscrasia and general prostration which it leaves.

Various observers have reported cases of monoplegia and hemiplegia, without indicating the pathological character.

Recently, in consultation, I saw a typical hemorrhagic apoplexy occurring in a case of influenza in a woman about 60 years old, who had previously been in fair health, and was not known to have had any disease of the kidneys or heart, although her vessels were some-

what atheromatous. Dr. S. S. Prentiss (Medical News, August 29, 1891), of Washington, has reported three cases of cerebral apoplexy occurring during the progress of the influenza—one was a man of 57 years of age; another in a man of 87; a third in a woman of 67. One of these was probably hemorrhagic, the other two from the histories were probably from thrombosis. In cases of this character the infection of the disease acts to bring out an apoplexy both by the changes which it produces in the blood, by its effects upon cardiac action and by the general debility induced. Such apoplexies might occur from other depressing causes; they are to be regarded, not as phenomena, but rather as accidents of the epidemic.

Uremic convulsions in patients suffering from chronic Bright's disease have been precipitated by the influenza, and it has seemen to me to have been active in lighting up lurking syphilitic diseases.

In one case of paretic dementia of somewhat irregular type, seen in consultation, the initial symptoms of the disorder were observed soon after recovery from a severe attack of grippe, the wife and friends of the patient, in fact, attributing the mental disorder to this attack. The probabilities are that syphilis was present, but latent, prior to the epidemic.

Purulent meningitis and brain abscesses have been somewhat frequently noted in connection with the numerous instances of purulent otitis media.

The relations of influenza to insanity have not received much attention from writers. Mairet (Grippe et Alientation Mentale; Montpellier and Paris, 1890), of Montpellier, has recently published a lecture on the subject delivered at his clinic for mental and nervous diseases. Rush, who is referred to by Mairet, speaking of the epidemic which lasted from 1789 to 1791, and particularly of the year 1790, mentions that several persons were stricken with symptoms of insanity, and that one attempted suicide; he also speaks of several having had hallucinations of sight. Bonnet, reporting on the epidemic of 1837, cites one case which was stricken with a furious mania as the result of the grippe; and Petrequin, referring also to the same epidemic, records several patients tormented by melancholy ideas, and states that four or five suicides were accomplished or attempted at the hospitals in Paris.

The following conclusions compress into small compass so much

that is valuable, with reference to the relation between influenza and the psychoses, that I cannot do better than quote them. They are reported as the conclusions arrived at by Dr. Leledy, and were presented to the Medical Society of London by Dr. Savage (Lancet, No. 3,558, and Medical News, January 16, 1891): (1) Influenza. like other febrile affections, may establish a psychopathy. (2) Insanity may develop at various periods of the attack. (8) Influenza may induce any form of insanity. (4) No specific symptoms are manifested. (5) The rôle of influenza in the causation of insanity is a variable one. (6) Influenza may be a predisposing or exciting cause. (7) In all cases there is some acquired or inherited predisposition. (8) The insanity is the result of altered brain nutrition, possibly toxic. (9) The onset of the insanity is often sudden, and bears no relation to the severity of the attack of influenza. (10) The curability depends on general rather than on special conditions. (11) The insane are less disposed to influenza than are the sane. (12) In rare instances influenza has cured psychoses. (13) The insane may have mental remission during the influenza. (14) There is no special indication in treatment. (15) Influenza may lead to crimes and to medico-legal issues.

I can indorse from experience almost every one of these conclusions. With reference to the statement that no specific symptoms are manifested, it should be said that while this, in a general sense, is true, the most frequent type is a form of melancholia.

The cases of active insanty have been observed at the onset of influenza and during its height, but more particularly during its period of decline and convalescence. The published cases have been recorded chiefly as instances of acute mania or melancholia. The commonest type of grippe mental disorder, as I have just stated, is a form of melancholia or lypemania; but as this not infrequently assumes the form of melancholia agitata, it is often regarded as mania by practitioners not accustomed to differentiate the varieties of insanity. These patients are intensely depressed and emotional; they are filled with apprehensions of dusgrace and ruin; they believe that they will never recover their former health; they are suspicious and delusional with reference to those who surround them; they are frequently unwilling to eat, or to rest, or to take medicine; and in some cases they have definite delusions of terrible character, for the most part hypochondriacal or religious.

They are frequently plagued with the thought of suicide, and sometimes make successful or unsuccessful suicidal attempts. They have been deprived by the ravages of the disease of mental and moral stamina. In the majority of these cases, but not in all, some hereditary or acquired predisposition is present. While, however, the grippe usually gives us mental disorder of special type—a form of delusional melancholia—under special conditions it may be the starting point or exciting cause of any variety of mental disorder, as mania, paranoia, paretic dementia, hebephrenia, etc., but I can no more than glance at this phase of the subject.

The investigations of Church show that in each year in Cook county, Illinois, the epidemic of influenza has been attended by an increase in the number of proceedings for the commitment of the insane, which he believes cannot be explained by increase or movement of the population of the county.

Of the influenza occurring in hospitals for the insane I have had no opportunity for observation except in connection with the insane department of the Philadelphia Hospital. A great disproportion has been observed between the number of cases occurring among the women and the men. One hundred cases are recorded as having occurred among 460 female patients, and only three in a larger number of men. The disease did not prove particularly disastrous among these patients, only three deaths having occurred from pulmonary complications. The cases were, as a rule, not of severe type, less severe than in an equal number of sane patients.

K. Helweg (Hosp. Tidende, R. 3, Bd. viii, S., 729) has recorded the results and action of influenza in the Asylum at Aarhus, Denmark, and Pritchard has translated and summarized this paper for the Review of Insanity and Nervous Diseases for December, 1891. The account is of such interest that I will give it in detail: "The disease appeared in the Asylum January 4th, a few weeks after it had first been observed in the neighborhood. Out of 520 insane 41 were so severely attacked that they were confined to their beds. The disease seemed decidedly contagious. It spread with difficulty on account of the wards being divided one from another. Eight of the 25 wards were spared altogether. When a ward would be invaded the disease would rapidly run its course to proceed to another. The transmission of the contagion could be distinctly seen in the sick wards where those stricken down in the other wards

would bring the disease with them and transmit it to patients there. Seven patients had pneumonia. A relatively large percentage (6) died, of which 4 were from pneumonia. Among these was a man with such a severe cerebral disease that he must be excluded (the post-mortem results in the remaining 5, which were women, were all more or less similar). The most essential results were extreme hyperamia of the cranial bones and membranes, where the dura and the brain mass itself twice presented fresh and strongly vascular pseudo-membranes with small hemorrhages as well. The veins and arteries of the thinner cerebral membranes were filled to bursting with blood; the large basal arteries were so filled with coagula that they stood out like cords, or those of an injected specimen. The brain substance itself was very hyperæmic, and its consistence increased. The average weight of these brains was about the ordinary of those of Aarhus. The writer also gives the history of the man mentioned, and those of the three other cases where influenza could not be diagnosticated during life, including the post-mortem findings of a case of influenza in a (sane) nurse who died of pneumonia. Here also was great hyperæmia of the brain and its membranes, yet not so pronounced as in the insane cases. The writer has seen influenza accompanied by severe psychic symptoms. In a few cases the condition resembled acute delirium, which, however, is transient, and seems easily controlled by antifebrin. On the contrary, in two hopeless cases of insanity the disease had such a favorable and curative action that they may be regarded as cured. In both cases there was pneumonia."

The epidemic influenza has impaired the *morale* of the community. Lack of spirit in work and an apprehensiveness with reference to health, business and all matters of personal interest are abnormally prevalent. The hysterical have become more hysteric; the neurasthenical more neurasthenic. Hypochondria has displaced hopefulness in individuals commonly possessed of courage and fortitude. In brief, certain neuropathic and psychopathic features have been impressed upon the community. We cannot afford even to dismiss entirely from consideration the bearings of the epidemic upon the increase not only of suicides, but of other grave crimes.

The use in influenza of hypnotics, narcotics, sedatives and motor depressants is a question of particular interest in connection with the study of the nervous and mental phenomena of the disorder.

Serious mental and nervous complications or actual insauities occurring during influenza have been attributed to the too free use of such chemically powerful remedies as phenacetin, antipyrine, antifebrin, chloral, bromides, sulfonal and paraldehyde; and our older narcotics, such as opium, hyoscyamus, conium and cannabis Indica, have also come in for a share of blame. Persisting conditions of nervous prostration and chronic respiratory and eardiac neuroses, have also been charged to drugs. Undoubtedly such criticisms have some foundation, but it remains true that each of the remedies named has proved itself of some value in the treatment of influenza, and particularly of its nervous types. The enormous consumption of a drug like antipyrine is a practical argument both for and against its use. What Grasset has said of this remedy might with almost equal truth be said of almost any of the rest. agent," he says, "vaunted by some as a panacea against all manifestations of the disease, is considered by others a remedy absurd and irrational in all cases. The truth would seem to reside between these two extreme opinions."

A CASE OF HEPATIC ABSCESS RELIEVED BY ASPI-RATIONS AND TAPPING.

By R. L. Gibbon, M.D., Charlotte, N. C.

Acute Suppurative Hepatitis, at all times a dangerous malady, and one calling for the highest development of medical and surgical art, is yet not of such rare occurrence as to render the publication of an ordinary case of any special interest, unless it be coupled with some original ideas of treatment, diagnosis or pathology.

The case given below is somewhat out of the usual order, and occurred in a comparatively young subject. It may therefore be of interest, although there is no claim for originality of procedure.

On May 10th, 1891, I was called to see Mary B———, aged 13 years, an employé of a cotton mill. She complained of a "lump" in her right side, with pain and tenderness.

There was a history of measles occurring two or three weeks before her present trouble, which latter she had first observed about ten days before I saw her. There was no traumatic cause for the swelling, nor could I elicit any history of a dysenteric nature. She had, during the last few days, grown progressively worse, and at the time I saw her the pain was of such a severe character as to render sleep or the erect posture almost impossible. The patient presented the usual appearance of the "mill hand"; was somewhat anæmic, but fairly well nourished. The tongue was not markedly coated, and the bowels rather loose; temperature, taken in the mouth, was found to be 103° F.

On examination of the affected part, a quite perceptible bulging was seen in the right hypochondrium, midway between the lower margin of the ribs and the crest of the ileum in the axillary line. The tumor was dull on percussion; no fluctuation, and was exquisitely painful to pressure. The dullness was found to be continuous with the liver—dullness which seemed itself to be increased in all directions. Abscess of the liver was suspected from the first, and a conservative line of treatment was adopted, consisting of hot fomentations to the side, regulation of diet, confinement to bed, and as drugs, quinine, with opium sufficient to procure rest at night. During the next few days the swelling grew larger and more distinct, and the constitutional symptoms more marked.

The patient usually lay on the left side, and when assuming the dorsal position always flexed the body to the right—latero-dorsal decubitus. The temperature ranged from 102° in the morning to 103° in the afternoon, observing the usual remittent type.

On May 19th, in company with Dr. Meisenheimer, I saw the case again. The patient's condition was decidedly bad. Her appetite was entirely gone and she took only stimulants in small amount. An unhealthy diarrhea come on, and the severe and continuous pain was only partially relieved by opiates. The face was drawn and pinched, the skin sallow and the whole appearance was ominous of a fatal termination unless speedy relief was obtained. The dullness now extended to within an inch of the iliac crest, but the tumor was still hard on palpation. At this visit an exploring needle was introduced, but did not find pus. Thirty-six hours later the needle of a hypodermic syringe was introduced into the most prominent part of the swelling, and about half a drachm of pure pus withdrawn. An aspirating needle was now inserted, and three ounces of matter removed. The relief was great for twelve hours,

after which time it became necessary to operate again. The symptoms persisting, a small trocar was introduced, and altogether about three-fourths of a pint of pus was withdrawn. As the patient for some days continued feverish and suffered some pain, we returned May 23d prepared to make a free incision and introduce a drainage-tube, when we were agreeably surprised to find such a proceeding unnecessary. The temperature was normal, the tongue cleaning, and the appetite had returned. The site of the abseess was still painful to pressure, and it was some time before the increased liver dullness passed entirely away. Recovery was a little delayed by an attack of intercostal neuralgia, affecting the right side, but the patient now presents every evidence of permanent recovery.

Throughout the case there was no manifestation of pus formation, such as chills or sweats; jaundice was entirely absent. The pus contained some shreds and débris, resembling hepatic tissue, but no bile. I regret to say that no microscopic examination was made for liver cells.

The prognosis of hepatic abscess is always grave, the mortality being variously estimated from 70 to 90 per cent. Frerich says: "Abscess of the liver terminates in death far more frequently than in recovery." When allowed to seek its own outlet, the prognosis varies with the locality selected. Discharge by the lungs is the most favorable route, while that into the intestine is the least so. Rupture into the peritoneal cavity sometimes happens, and is usually fatal.

In regard to diagnostic points, modern authorities are mostly agreed upon the harmlessness and utility of exploratory punctures, when properly done, in all cases of a doubtful nature. By enabling us to establish the fact of an abscess early in the case, we are relieved from uncertainty and the patient often saved days and weeks of suffering, while the prospect of recovery is materially increased.

The treatment of abscess of the liver is based upon the surgical maxim which demands the evacuation of pus wherever found. As to the method to be used in accomplishing this result, there is some diversity of opinion. In a case read before the Philadelphia Medical Society, by Dr. G. W. Vogler, the patient, a little girl 12 years of age, was treated by free incision and the introduction of a

drainage-tube. The result was most favorable. Speaking of the treatment by aspiration, Dr. Vogler says: "Imperfect removal of pus by one or more aspirations or punctures, permitting more or less to remain behind, will, in addition to that constantly forming, undoubtedly keep up constitutional symptoms, and finally produce a fatal issue by rupture or blood-poisoning, if the very rare act of absorption does not take place." On the other hand, many prefer the aspirator to either the trocar or drainage-tube. Bartholow, in Pepper's "System of Medicine," quotes his own and the experience of others to prove the advantages of the former method, while admitting the utility of free incision when the abscess is very large, or the parietes of the abdomen are involved. As is often the case, the truth probably lies in a combination of both methods It would doubtless be expedient and proper to aspirate first, and, in case of failure to relieve, to resort to free incision and drainage. This plan would seem all the more advantageous as one or more punctures of the needle would facilitate the adhesion of the abscess to the abdominal wall, thereby doing away with one of the principal objections to incision, that of allowing the escape of purulent matter into the peritoneal cavity.

ŒSOPHAGEAL OBSTRUCTION—TREATMENT BY ARTI-FICIAL DIGESTION.

By R. H. WHITEHEAD, M.D., Chapel Hill, N. C.

The following account of the treatment of a case which recently occurred in my practice may not be without practical and scientific interest. In addition, I have a personal motive in publishing the case, as there have appeared in the newspapers some reports of it in a rather sensational tone and admitting of a construction unjust to myself.

On February 2d last P. L., a negro girl 9 years old was brought to my office by her mother, who gave the following history:

Six days previously, while eating beef-steak at her home in Durham, the child was suddenly seized with pain in the throat and inability to swallow. On the next day her mother carried her to

her physician, but as he was soon afterwards called away from Durham by telegram, the girl was transferred to the care of a colored practitioner, whose name has escaped my memory. The girl's symptoms becoming no better, her mother brought her to me, under the impression that the offending substance was in the stomach, and with the intention of asking me to remove it by operation. The child was greatly emaciated, and her desire for water and food amounted almost to mania, but yet unable to swallow anything without its being instantly regurgitated. Rectal injections of milk had been employed, but their use abandoned on account of irritability of the rectum.

As there was some difficulty of breathing, examination was made first with the finger and then with the laryngoscope, but nothing could be detected. Then a probang was introduced with much difficulty owing to the struggling of the child and the sensitiveness of her throat. An obstruction was encountered at a point judged to be behind the left bronchus; but after using as much force as was deemed justifiable, it could not be pushed on to the stomach. It then occurred to me that the beef might be digested in situ by the use of pepsin and hydrochloric acid, provided a sufficient quantity could be kept in contact with it. Having first ascertained that about 20 drops of fluid was the largest quantity the girl could swallow without regurgitation, she was directed to take 15 drops of pepsin cordial and 5 drops of dilute hydrochloric acid every ten minutes. I watched her very carefully, and the directions were faithfully followed. After three or four doses were taken the quantity accumulated would be regurgitated. After five hours of this she threw up a piece of cartilage about the size of the last phalanx of the little finger, but was still unable to swallow. After two more hours, however, she could swallow with ease and speedily recovered. It is possible, of course, that the mass was carried down into the stomach spontaneously by the contractions of the esophagus, or that the beef was distintegrated by decomposition. However, neither of these suppositions seem probable, as there was no fætid odor about the cartilage, and the shreds of tissue clinging to it showed the action of a solvent. The pepsin used was the preparation "Pepsin Cordial" made by Parke, Davis & Co., a very reliable firm, a fluidrachm of it being warranted to dissolve 1,000 grains of albumen. We have many testimonials to the efficacy of

pepsin in dissolving blood-clots, sloughs, etc. (See various papers by R. T. Morris, of New York.)

Should a similar case ever occur in my practice again, I should feel inclined to first attempt to anæsthetize the æsophagus with cocaine, in the hope that thus a larger quantity of the solution might be retained for a longer time.

The writer can remember no case recorded in our literature in which similar treatment was employed, but doubtless it has suggested itself to others. Dr. T. J. Wilson, of this place, tells me that he had recourse to the same treatment, with success, a year ago, in the case of an old glutton choked by a piece of beef heart. The physician first in attendance had pushed it down the œsophagus, hoping to get it to the stomach, but it became impacted so firmly as to forbid any further attempts in that direction. I am also reliably informed that Dr. K. P. Battle, of Raleigh, has employed pepsin to dissolve a slough—formed by caustic potash—which had gone down into the œsophagus.

On the whole, it seems to me that this treatment well deserves a trial in cases of digestible substances impacted in the esophagus, before resorting to esophagotomy.

Mr. W. SAUNDERS, of Philadelphia, announces important new medical works now in preparation, ready for delivery about June 1, 1892, for sale by subscription only: 1. The American Text-Book of Surgery, by Profs. Keen, White, Burnette, Conner, Dennis, Park, Nancrede, Pilcher, Senn, Shepherd, Stimson, Thomson and Warren; forming one handsome royal cctavo volume of about 1,200 pages (10x7 inches); profusely illustrated with wood-cuts in text, and chromo-lithographic plates; many of them engraved from original photographs and drawings, furnished by the authors. Price, cloth, \$7.00; sheep, \$8.00 2, An American Text-Book of the Theory and Practice of Medicine, According to American Teachers. Edited by William Pepper, M.D., LL D., Provost of the University of Pennsylvania. To be completed in two handsome royal octavo volumes of about 1,000 pages, with illustrations to elucidate the text wherever necessary. Price per volume, cloth, \$5.00; sheep, \$6.00; half Russia, \$7.00. Agents wanted.

CURRENT LITERATURE.

SOME EXPERIENCE IN THE TREATMENT OF CHRONIC RING-WORM IN AN INSTITUTION—HE GIVES THE PREFERENCE TO CHRYSAROBIN.

Prof. Louis A. Duhring, M.D., in the February number of the American Journal of the Medical Sciences records a most instructive lesson of a struggle with a ring-worm in an institution where it had taken foot-hold, and he was employed to free it if possible. The disease had been prevalent for some years, and lately it had been spreading in spite of care and attention on the part of physician and nurses. In the 48 cases affected the disease had existed from six months to three years, the average being a year.

The author confines himself to the therapeutics of the disease, with a view to giving the result of a year's work with the several local remedies prescribed.

The hair, as a rule, was clipped short about once a week, but in some cases the scalp was regularly shaved every few days. Epilation was, for reasons explained, not practiced. Early in the treatment it became manifest that many of the cases represented the most rebellious types of the affection, and that perseverance, powerful parasiticides and time would be required to cure the disease, which was literally firmly rooted. Subjects of dark complexions tolerated much stronger formulæ than those with light hair. From time to time treatment had to be suspended to allow inflammation due to the remedies to subside. From time to time it became necessary to use cleansing agents to clear the surface of scales, crust and débris, the result either of the disease itself or of the remedies applied. For this purpose a mixture of soft-soap and sulphur was generally used. The parasiticides used were in the following order:

Carbolic acid: This was used extensively in the form of an ointment and as a mixture with olive oil and with glycerin, in strength varying from half-drachm to two drachms to the ounce. One of the formulæ was carbolic acid, 3j-3ij; ointment nitrate mercury, 3ij-3jv; sulphur ointment, 3iij-3v. In a few cases

tar ointment was substituted for the mercurial. His experience in these cases inclines Dr. Duhring to give carbolic acid a comparatively low rank.

Tur was prescribed mainly with carbolic acid, or with sulphur, or ointment of nitrate of mercury, but nothing favorable can be said of it.

Iodine was prescribed in the officinal tincture and double strength, and as Coster's paste, consisting of iodine, Z ij and oil of tar, Z j. Because it was a discutient in these combinations, and the epidermis is raised and thrown off by it, leaving no remedy in contact with the scalp, he saw reason to employ it in the combination as an ointment. In this connection he lastly refers to a preparation of iodine, Z ss; carbolic acid, Z j; and glycerin, Z j, but it was not found efficacious.

Oleate of copper possessed no curative influence.

Mercuriuls were prescribed chiefly in combination with sulphur and carbolic acid. Some of the preparations were employed alone, such as the ointment of the nitrate and oleate of mercury. The latter was given a faithful trial in from 10 to 30 p. c. strength, the results not meeting expectations. Calomel was found of value in subduing inflammatory action from whatever causes due. Corrosive sublimate was not deemed a safe remedy to such large surfaces.

Croton oil, in sluggish cases, proved especially useful in provoking acute, purulent, inflammatory action. After this had been well established, the milder parasiticides, as the sulphur ointments and lotions, were advantageously prescribed.

Canthuridal blistering fluid was used, but possessed no special virtues.

Sulphur was used mainly in the form of an cintment from one to three drachms to the ounce. It did best as a weak ointment after the stronger remedies, and more particularly in clearing up scurfiness. It proved an efficient mild parasiticide.

Chrysarobin was prescribed in 29 cases. Some of the patients tolerated a much stronger ointment than others; thus in one case nine applications of a two-drachm to the ounce ointment were made, without causing swelling or inflammation of either scalp or face. There were groups of cases in which he used strong ointments without causing severe inflammations, if due care was taken to avoid the face in using it. It is a remedy always to be handled

with caution. It proved the most valuable parasiticide in the list. In the form of ointment it possessed power to penetrate the follicles and to destroy the life of the fungus, and in this latter power lies its great worth. In no instance was chrysarobin combined with other remedies.

He concludes by saying it should be applied in the smallest quantity possible, and well rubbed in with a bit of cloth or a mop. Used with caution, staining of the skin of both nurse and patient may be reduced to a minimum.

In the class of ring-worm under consideration Dr. Duhring remarks it is always slow, but he has no hesitation in giving the preference to chrysarobin. He pronounces it the most potent remedy at our command, and is not only valuable, but comparatively safe, and that, with due caution, it may be applied to the scalp, under the supervision of the physician.

A BUSINESS OR A PROFESSION—WHICH?

In the long run his acquaintances measure the doctor by his own standard. That something called "character" forms the basis of this standard. In speaking of a prominent physician lately in the writer's hearing, the remark was made: "He is a pure business man, and so takes no interest in professional matters that do not lead directly to an increase of his bank account." It was not meant that he was a professional man who conducted his affairs in a business-like manner, but that his character was that of a business man. He was a business man with business methods.

In his story entitled "Characteristics" Dr. S. Weir Mitchell says:

"A friend of mine, a physician, did a rich manufacturer a great service in the way of his profession. When the obliged man asked for his account, he requested a reduction for prompt payment, and, on this being declined, grumbled over the amount. The doctor was immovable. 'You are at liberty,' he said, 'to pay nothing or all.' 'But this is business,' answered the other; 'why not discuss it like any other business?' 'I am not a business man,' said my friend; 'I belong to a profession. I sell that which no man can

weigh or measure.' Finally the bill was paid, and then the manufacturer, suddenly changing his tone, said: 'Well, now that this business is completed, I should like you to accept this as a slight token of our gratitude' It was a check for thrice the amount of the debt. The doctor said: 'No; I never allow a man to overpay me.' The next day the check was sent to a hospital in which the physician was interested."

The latest notoriety of a pure business man donning the robes of a profession is the proprietor of the Keeley inebriate cure. Evidently he exhibits none of the characteristics of a professional character. Certainly this feature, for the present, seems to commend him to the good-will of business men and shrewd individuals outside of medicine. These intelligent persons forget to ask themselves the inevitable results which would follow the adoption of this method by all members of the profession.

We think it greatly to their credit that so generally those who have entered the medical profession have laid aside a business character and put on a professional one, one that has been the gradual evolution of countless ages. Thus has progress in the healing art been possible, and thus has humanity reaped the advantages of a class of men devoted unreservedly to the study of the prevention and cure of the ills afflicting the human body. It is quite compatible with such a professional character for the doctor to conduct his affairs according to those business methods that experience has shown to be most advantageous to all parties interested.

QUININE COST \$20 per ounce in 1823, then given in very minute doses and at a cost not large by reason of this dosage; in 1853, \$3.00, then a prime necessity; in 1861, about \$1.50; during the war on the Confederate side, because it was made contraband of war, from \$5.00 rapidly up to \$100 an ounce; just after the war, in the subjugated States, at \$5.00; while now it costs from 18½ to 24 cts. This very low price is due to the rectified tariff in a great measure, but in a very appreciable way to the immense consumption of the new antipyretics.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editors.

Original communications are solicited from all parts of the country, and especially from the medical profession of The Carolinas. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the Journal, by sending the address to this Office. Irompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to Thomas F. Wood, M.D., P. O. Drawer 791, Wilmington, N. C.

WILMINGTON HOSPITAL FOR 1891—AN INDISPENSA-BLE PUBLIC CHARITY HONESTLY CONDUCTED.

From the humblest beginnings the Wilmington Hospital has achieved a mission for good that is worthy of record occasionally in the Journal. In speaking of this Hospital we keep out of mind the palatial structures of the large cities, for most of them are the productions of great wealth having its expression in the truest models attainable in architecture and in sanitary appliances, monumental designs, the exponents of overflowing philanthropy of the few rich, while ours is the struggle of as true a philanthropy, only limited by a slender purse. In a community with a considerable

majority of negroes, the burden of charity falls heavily upon the white tax-paying portion, and nothing but the closest economy makes it possible to have a hospital at all. In spite of all these disadvantages the outcome of the work compares favorably with institutions having unstinted facilities.

Dr. W. W. Lane, the faithful medical officer resident and in charge, reports that there has been only one death following the 20 surgical operations during the year. Among these operations are some of the most formidable character: three laparotomies, including one for ectopic pregnancy; a double leg amputation for railroad injury; amputation of one thigh with intra-capsular fracture of other femur; supra-pubic operation for stone; and operation for radical cure of hernia. This last was the fatal case.

Only one case of pneumonia and one of typhoid fever is reported in a hospital population of 172. The admissions from syphilis and malarial fever were the greatest of all causes of disease mentioned, and of surgical injuries there were 41 fractures.

Dr. Lane calls the attention of the Board of Managers to the necessity of some other mode of heating than by stoves, which seems to us to be an all-important demand. The danger of fire, with an almost certain loss of life in a building of such combustible material, with no fire escapes, is great, although most of the patients are on the first floor, with verandas on both sides of the wards and ample windows reaching to the floor, opening on to the verandas. Safety, economy and comfort will be accomplished by heating with steam. While all the improvements have been slow, they are manifestly in the right direction. The difficulty in separating colors and sexes has been accomplished, but much of the interior arrangement is rudimentary, and we are sure that the good sense of the Managers will correct and improve them as they have the ability.

The greatest need of such an establishment is proper nursing and this cannot be accomplished by utilizing convalescents, or in any other way than by having properly instructed and disciplined nurses. No hospital can attain a first-class position without the best nursing facilities, and the Managers cannot longer delay this without losing caste. The expense is unavoidable, and should be provided for as that of a prime necessity.

Moreover, we go farther, and say that from a well regulated

hospital should emanate the best principles of nursing, and no hospital fills the full measure of its usefulness until it is the centre of the training of a supply of nurses for the whole section in which it is located. When it gets to be the fashion to leave bequests for charitable institutions, none will deserve more serious consideration of the willing rich, than to found a training school for nurses. There are gentle women a plenty who need occupation, who are suited to nursing by strength, healthfulness, grace and education, but who know not how to begin or where to go.

THE NEXT SESSION OF THE BOARD OF MEDICAL EXAMINERS OF NORTH CAROLINA.

The next annual session of the Board of Medical Examiners will be held in Wilmington, beginning on Monday, the 22d day of May, and remaining in session until all candidates are examined.

The examinations are written and oral, and at this session, as we understand, a number of applicants, chosen by lot, will be required to make clinical diagnoses of cases presented to them.

We have received numerous letters on the subject, the drift of each enquirer being as to the requirements of the last session of the Board. Letters on this subject should be addressed to the Secretary, Dr. L. J. Picöt, Littleton, N. C.

BE SURE YOUR PEROXIDE OF HYDROGEN IS PURE.—Our learned chemist friends of the American Druggist, quoting from the Journal Chem. Soc'y, says that when a drop of 10 per cent. solution of metaphenylene-diamine chloride is boiled with a few drops of water and a drop of hydrogen peroxide solution, a carmine red coloration is produced. Try it!

FOR THE DRY, ringing cough of influenza the following is a good combination:

B.—Syrupi picis	jss.
Spts. ammoniæ aro	38.
Syrupi pruni virg 3:	ss.
Potassii iodidi 3 s	s.

M. S. Teaspoonful 2 to 4 hours apart.

THE THIRTY-NINTH ANNUAL MEETING OF THE MED-ICAL SOCIETY OF NORTH CAROLINA WILL BE HELD IN WILMINGTON ON THESDAY, 24th MAY,—AID THE SECRETARY AND LOCAL COMMITTEE OF ARRANGE-MENTS WITH THE PROGRAMME.

Preliminary preparations are being made for the next annual meeting of the State Medical Society. Appropriate committees have been appointed, and, as far as the local Society can go in this matter, they will make the meeting pleasant. The beautiful building of the Young Men's Christian Association has been secured, thereby ensuring the most complete and pleasant auditorium and committee rooms in the State. This new building is located on Front Street, corner of Mulberry, in full view of the river, near the hotels and in easy distance to all the railroads, and the streetcar passing the door.

The auditorium, which is beautifully lighted, will seat 550 persons, and will serve for the general and special sessions. There is an ample hall and waiting-rooms for candidates for the Board of Examiners on the third floor, and for other committee rooms on the second floor. All of the privileges of the establishment will be accorded to the members of the Society and their families and friends during their stay.

The seaside resorts will, by the time of the meeting, have opened for the season, thus putting the ocean within a few minutes ride by

rail or by steamer.

From the mountains to the seaside is a sudden but a beautiful transition, and we want every doctor in the State who can leave his work with any kind of good reason, to come and sniff the ocean breezes, mixed with just enough of the odor of the shop to make it agreeable.

The Wilmington Medical Society has a Committee on Arrangements in working order, and all letters addressed to Dr. Robert D. Jewett, Secretary of the Committee of the Wilmington Medical

Society, will be promptly attended to.

Those who have papers prepared and preparing for the meeting, will please communicate, without delay, with the Secretary, Dr.

J. M. Hays, Oxford.

The Committee of Arrangements consists of Drs. Thomas F. Wood, Chairman ex-officio; Geo. Gillett Thomas, F. W. Potter, J. C. Shepard, W. J. H. Bellamy, Thos. S. Burbank and R. D. Jewett.

SOCIETY MEETING.

STATED MEETING OF THE BUNCOMBE COUNTY MEDICAL SOCIETY.

The stated meeting of this Society was held at Asheville, N. C., February 1st, 1892, with President K. von Ruck, M.D., in the Chair.

The regular paper for the evening was not read, owing to the absence of the essayist, Dr. Weaver.

Dr. von Ruck read the report of "A Case of Malignant Pustule" upon the fore-finger of the left hand, which came under his notice before general infection had occurred. The pustule presented the characteristics as described in medical literature, the source of infection was, however, obscure. The patient had been handling cattle, and the day before its occurrence had cleaned out with his hands the mangers of his cattle barn.

Microscopical examination of the discharging serum from the vesicle was negative, but upon consultation it was determined to destroy the vesicle and its base with fuming nitric acid, and to make culture experiments with the discharging serum. The culture in a moist brood oven, with a temperature of 100° F. succeeded, and the diagnosis was confirmed by the characteristic growth of the anthrax bacillus. The patient made a prompt recovery.

Dr. Watson related his experience with two cases of malignant pustule, which occurred in his practice some fifteen years ago, at a time when the subject of anthrax was not as well understood as now.

The diagnosis in the first case was therefore not promptly made, and the child died in forty-eight hours. In the meantime another child in the same family was also infected, the mother bathing a sore upon its leg in the same basin that had been used in bathing the pustule, and this child also died after a brief period.

Dr. Taylor said that he had never seen a case of anthrax in his practice, but referred to the case reported as a triumph in the progress of scientific medicine; by the application of its discoveries in bacteriology, the diagnosis had been established beyond a shadow

of doubt, and in the timely employment of proper means a life had undoubtedly been saved.

Dr. Williams reported the case of a primapara delivered after a tedious labor. Only two digital examinations were made during the progress, under antiseptic precautions. Anæsthesia became necessary in the third stage on account of rigid perineum. Bichloride solution 1 in 5,000 was used in irrigating the vulva and an aseptic pad was applied after the labor was completed.

There were a few rents in the vaginal mucous membrane and two very slight lacerations upon the cervix, such as frequently occur. The labor terminated without any complication at 5:20 a.m.

At 2 p. m. the patient experienced a chill lasting fifteen minutes; this was followed by a temperature of 1025° F., which the doctor found upon his arrival. He irrigated the vagina with a bichloride solution, 1 in 5,000, and at 4 o'clock, with very profuse perspiration, the temperature fell to the normal and remained so throughout the lying-in period. Nothing further occurred to disturb the convalescence. Dr. Williams could not believe that the symptoms were of a septic nature, occurring so soon after delivery and subsiding so quickly and completely. He therefore favored the theory of a nervous disturbance resembling the reaction from shock, and asked for the opinions of other members.

Dr. Ballard and Dr. Watson inclined to the theory of nervous influence as a cause.

Dr. Taylor could not believe that shock existed, there being no such depression observed, and gave as his opinion that in such cases decomposition or biochemical changes of some kind must have preceded in the genital tract, especially in the uterine clot, and that the absorbed serum from such clot gave rise to the temporary septic symptoms. He had seen chill and fever follow the injection of defibrinated blood in acute anæmia in the course of a few hours and believed that the absorption into the blood of the changed blood serum was a rational explanation in Dr. Williams' case.

Dr. Watson subsequently desired to be put on record as favoring a temporary sepsis, which he believed was more probable inasmuch as the labor had been tedious, and because no irrigation had been used after the labor was completed; the broken surfaces of the cervix and vagina being the avenues for septic absorption, which was arrested by the subsequent irrigation.

The Society then adjourned.

CORRESPONDENCE.

THE CASE OF AN INFANT OF A WOMAN ENSLAVED BY OPIUM DYING FOR LACK OF THE NARCOTIC.

Messrs. Editors North Carolina Medical Journal:

DEAR SIRS:—Anent the paragraph in the current numer of the Journal from Dr. Wood's Therapeuties, in which he states that the new-born children of opium-eating mothers are prone to die within forty-eight hours for want of their nerve stimulant, I report the following ease:

Svlvia P., æt about 40, a respectable colored woman, gave birth to her first child September 18th, 1886. Sylvia had for many years been a great sufferer from vaginismus and consumed large quanti ties of morphine daily. The late Dr. P. W. Young had several years previously removed her coccyx, and the labor, though slow, was uneventful. The child was well developed and all promised to go well. On the next day the child died in a state of collapse preceded by hæmatemesis. I studied the case very carefully at the time, but the authorities to which I had access were all very vague in giving the etiology of hemorrhage from the stomach in newborn infants. I reached the independent conclusion that the cause of death in this case was the sudden withdrawal of the morphine which had become an essential element in the blood of the child during its intra-uterine life. I am now more than ever convinced that this was the proper solution of the problem. Under similar circumstances I would in the future not wait for serious symptoms to develop in the child, but immediately after birth institute a course of treatment for the opium habit, based upon the quantity of the drug used by the mother. If the mother's normal weight were 120 pounds and the quantity of morphine consumed by her in twenty-four hours 8 grains, the proportion going to the child just before birth would be about 1 grain for the twenty-four hours This I should give (making out the proportions in each individual case, of course) with a gradual diminution in quantity until danger is past. I believe the hypodermic method of administration should

be used—a method not fully appreciated and far too little used in the treatment of children's diseases.

In connection with the case just reported I will say that parturition cured the vaginismus of so many year's standing, and I think Sylvia has never taken any form of opium since that day.

Yours, very truly, J. M. HAYS, M.D.

REVIEWS AND BOOK NOTICES.

A SYSTEM OF PRACTICAL THERAPEUTICS. Edited by HOBART AMORY HARE, M.D., assisted by WALTER CHRISTIE, M.D. Vol. I. Philadelphia: Lea Brothers & Co., 1891. Pp. 1,050.

This is an encyclopediac work on therapeutics on a very elaborate scale, and "with a view to completeness the editor has introduced surgical therapeutics in the discussion of those ailments where such interference is indispensable."

The present volume is introduced by Prof. H. C. Wood, in a chapter entitled General Therapeutic Considerations. In this chapter will be found some wise and mature opinions from our foremost American therapeutist, from which one may catch suggestions upon points which diligent study may not have enabled him to formulate. The subjects he discusses are: Empiricism-"a method that may be defined as the using of a certain remedy in a certain disease because it has seemed to do good in similar cases"; Therapentic Symptomatic Laws, which includes a consideration of Homeopathy. This "system" has never been much of a rival in the Southern territory, but we would presume the most ardent follower of it would not complain of unfairness of treatment from the pen of Dr. Wood. "It is plain," he says, "that neither in homeopathy nor in allopathy, neither in the doctrine of similars nor in the doctrine of dissimilars, is there the whole truth." * * * "Neither allopathic nor homeopathic doctrines are laws; they are mere expressions of coincidences, each of them base coin gilded with just sufficient of truth to pass current with the ignorant and the unwary."

The Scientific Method is discussed. Some of his conclusions are that, in following the scientific method, "we must acknowledge, first, as a fundamental axiom, that no amount of experimentation can overthrow a clinical fact, although when a contradiction between experimental and bedside observation seems to arise, such contradiction challenges the correctness of the alleged clinical and experimental facts alike, and should lead to a careful reëxamination." There are too many good points in this Introduction to allow us to pass by them, but as we must give our readers the entire physiognomy of the volume, we pass to other subjects, calling their particular attention to the section "On the Combining of Drugs." We believe more ignorance is shown by the generality of doctors in this one part of the art he practices than in diagnosis.

Professor Remington follows Professor Wood in a chapter of practical importance on "Prescription Writing and the Combination of Drugs." It is of elementary things he writes, and one taught in the shop after the good old custom would not need such a chapter. In fact, according to our way of thinking, it will take "line upon line, precept upon precept" to make the doctor who got no early training in pharmacy to attain unto respectability in the art of combining medicines and prescription writing. When he suspects he is wrong he will peep into this book for enlightenment, leaning eventually upon the kindly offices of his friend, the educated apothecary, to give the patient an elegant finished product, much after the manner of the contributor to the journals who submits crude throughts, inelegant composition, and illegible writing to the alembic of the editor's office in full confidence that the outcome will be a clear page of elegant typography.

"Electrical Therapeutics" is from the pen of Dr. A. D. Rockwell, a name now sufficiently established in this infant realm of science to give assurance of a true exposition of the subject.

"The Swedish Movements and Massage," and "General Exercise" have their proper places in a work of this kind, but these subjects are greatly over-written here and elsewhere. Now, if ever, is the time, and in such a work the place, to state authoritatively methods and results, and then relegate such elements to school-books on hygienics.

"Climatology," a department of knowledge in which we are

slowly accumulating some facts, is rationally considered in a well digested article by S. Edwin Solly, M.R.C.S., L.S.A. The scientific arrangement of the topics will encourage the student whose previous knowledge has come from the high-altitude advocates, the pinebelt zealots, or the tropical-air doctrinaires, whose beautifully illustrated pamphlets with the inevitable moral, flood the land, because in this volume he will find some substantial principles as to the possibilities of climate.

None are better able to write with authority upon the topic of General Sanitation that Dr. Henry B. Baker, the Secretary of the Michigan Board of Health. No one in this country has devoted so much persevering study to the subject as he, having exclusively devoted his life-work to this one department, making his reports text-books for other boards of health in the country.

"Tuberculosis," by Solomon-Solis-Cohen, M.D.; "Scrofulosis and Rachitis," by Walter Chrystie, M.D.; "Rheumatism and Rheumatoid Arthritis and Gout," by James Steward, M.D., and "Diabetes Mellitus," by Frederick A. Packard, treat these subjects on the broadest therapeutical basis, which, especially as regards tuberculosis, will be studied with that absorbing interest that attaches to the removal of the investigations of this dread disease, and under the hopeful stimulus of the opening sentence in Dr. Solis-Cohen's article—"Tuberculosis is a curable disease."

Having now made a running commentary of the first volume, it remains to give our general impression of it. This we will do in a few words. It appears to us to merit the same position in therapeutics as Pepper's System of Medicine does to the practice, or as Keatings Diseases of Children does to that branch. While some of the chapters on elementary topics are disproportionately elaborate, for even an encyclopediac work, the editor has done wisely in distributing the work among those whose competency in their special lines will secure the confidence of the profession.

We look forward with increased interest to the volumes yet to come, and as they will deal with special therapeutics, the merits of the whole work may be better comprehended and more wisely judged.

THE PRINCIPLES OF BACTERIOLOGY: A Practical Manual for Students and Physicians. By A. C. Abbott, M.D., with illustra-

tions. Octavo, 263 pages. Muslin. Lea Brothers & Co., Philadelphia.

The practical teaching of bacteriology has so recently been adopted in the medical schools that the vast majority of the practicing physicians to-day are entirely ignorant on the subject. It is a subject, however, that enters so largely into the etiology and prophylaxis of diseases that all physicians, who have at heart the advancement of the science of medicine and sanitation and the accomplishment of the greatest good, should acquaint themselves with it. Especially is this true of those physicians who hold the office of county Superintendent of Health.

For the beginner who must pursue his studies with only his text-book as his teacher, the volume before us is most excellently suited, for, as the preface says: "Presuming the reader to be unfamiliar with the subject, the author has restricted himself to those furdamental features that are essential to its understanding. The object has been to present the important ideas and methods as concisely as is compatible with clearness, and at the same time to accentuate throughout the underlying principles which govern the work. With the view of inducing independent thought on the part of the student, experiments have been suggested wherever it is possible."

The subjects on sterilization, disinfection, and the bacteriological study of water, air and soil especially, deserve the careful attention of superintendents of health.

Chapters are devoted to the preparation of media, the technique of making dates, methods of staining, solutions employed, etc. In short, the book is practical and useful.

R. D. J.

PLAIN TALKS ON ELECTRICITY AND BATTERIES; with a Therapeutical Index. For General Practitioners and Students of Medicine. By Horatio R. Bigelow, M.D. Philadelphia: P. Blakiston, Son & Co., 1891. Pp. 85. Cloth.

There is so much written about, and such contrary opinions as to the value of electricity in therapeutics, that the general practitioner who has little time, and less inclination to enter into the wrangles of the disciples of the different leaders, will be glad of this little volume of 85 pages; for here they will find a short and practical description of the three varieties of electricity—static, galvanic and induced—with a definition of terms, descriptions and cuts of the

machines best adapted for the general practitioner, and an index of the therapeutic application. He is thus enabled, with the least expense, to secure the best apparatus with which to make the tests for himself. Without this direct clinical study of the subject, any opinion as to its merits must be based on simple faith of the statements of one side or the other.

R. D. J.

SURGICAL ANATOMY, FOR STUDENTS. By A. MARMADUKE SHIELD, M.B. (Cantab), F.R.C.S. New York: D. Appleton & Co, 1891. Pp. 226. Cloth.

In the preface the author says: "The book is intended for students to use with the living model. The study of surgical anatomy from illustrations alone is answerable for many of the rejections in this subject at the final examinations. No picture or description will enable a student to instantly compress the subclavian artery, place his finger on a given prominence, or name a deeply seated tendon." In accordance with this idea the author has omitted all illustrations from his work, making it necessary for the student, if he understands what he reads, to demonstrate it for himself on the subject. The author further says: "These demontratio ns have always been given upon the living subject"; so that it would be entirely practicable for students rooming together to use each other as subjects. Anatomy is the ground-work upon which all medical and surgical knowledge is built, and the building will surely be unstable and unsafe unless this ground-work is carefully and thoroughly laid. It is a branch that has in former years been sadly neglected in the colleges, and the branch, more than any other, that has been the cause of failure to pass the State examina-tions in this State. This system of "State inspection" has caused more attention to be given to the subject, as the rating of the papers in the hands of the Secretary of the State Board of Examiners will show.

This work is devoted exclusively to surgical anatomy, with only sufficient allusions to operations and injuries to make the text inter-

esting and to show the application of the knowledge.

The book is small enough (by the omission of cuts) to be carried in the over-coat pocket, and the subject-matter is carefully treated. The usefulness of the book is only slightly marred by such a lapsis pennæ as, on page 37, where the third part of the subclavian artery is described as extending "from the outer border of the scalenus anticus to the outer border of the last rib," or that on page 169, where Nelaton's line is given as a "line from the anterior-superior spine to the tuberosity of the ilium."

R. D. J.

CURRENT NOTES.

PAY OF MEDICAL OFFICERS IN THE AMERICAN REVOLUTIONARY ARMY.—Colonel, \$75; Surgeon, \$33.33; Surgeon's mate, \$18 a month; but in addition to this they were to get land, from 200 to 500 acres, if the war ended successfully. Confederate Assistant Surgeons got \$110 a month, the purchasing value of which, when the war ended, was so impaired that two months wages would not buy a pair of cavalry boots, and after taking seven milk punches his \$10 in change might have bought a pocket-knife.

VACCINATION.

To vaccinate or not? That is the question; Whether 'tis better for man to suffer The painful pangs and lasting marks of small-pox, Or to bare arms before the surgeon's lancet, And, by being vaccinated, end them? Yes, To feel the tiny point, and say we end The chance of many a thousand scars That flesh is heir to, 'tis a consummation Devoutly to be wished. Ah! soft you now, The vaccination! Sir, upon your rounds, Be my poor arms remembered.—Puck.

Chloralamid to Procure Sleep for Pneumonia Patients.—It is always a matter of perplexity to induce sleep, usually so much needed with our pneumonia patients. All opiates are for most part contraindicated, and none of the anilide preparations are entirely safe. Charteris says in his excellent little work on "Practice": "Sleep in some cases must be secured by a hypnotic, and to obtain this without interfering with the progress of the disease, chloralamid, in a dose of 20 or 30 grains, appears to be better than any preparation of opium, as its action does not materially influence the breathing or the circulation. Bromide of potassium, "in a dose of 30 grains, is also valuable, but its action is not so certain as that of chloralamid." It may be given in weak spirituous or acidulated solution. It is incompatible with alkalies.

Large Doses of IPECACUANHA IN DYSENTERY doubtless had its confirmation and general adoption by the profession from the

writing of Dr. W. E. McLean in Reynolds' System of Medicine. But the earliest notice of it we find is in Memoirs of the Medical Society of London, 1799, in an article by W. Balmain, chief surgeon of New South Wales, who caught the idea of large doses from the popular favor in which it was held among the people as a domestic remedy, having been introduced as a nostrum by a man who was the son of a German soldier. The dose was from 1 to 2 drachms, with addition of a few drops of tincture of opium. This new therapeutic measure was sent to the Medical Society of London December 21, 1795. Dr. McLean attributed the revival of Radix Anti-Dysenterica (as it was called, have been known in Peru from remote times) to Mr. Docker, an English surgeon. Jean Adrian Helvetius [1661–1727] first used it in Europe as a decoction for dysentery. There must be an earlier date even than that of Balmain, namely, 1795. Can anyone put his finger on it and inform us?

Local Chloroform Anesthesia.—In the Medical Press for November 18, 1891, a correspondent reports the following method of producing local anesthesia: "During the past winter I removed a small tumor from the hand of a nobleman in Rome, having first frozen the part by means of chloroform applied by spray. Unwilling in this case to administer it internally, and anxious to try its effect externally, I sprayed his finger about ten minutes with chloroform. Before commencing the operation the finger became quite cold, and felt like a piece of ice. The removal of the tumor subsequently was not felt by the patient. The chloroform did not produce any effect on the circulation nor on the nervous system. The operation lasted about five minutes, the patient declaring he felt nothing. I drew the cut surfaces together with silver wire, which I removed on the fifth day, the part healing by first intention under carbolic acid lotion.— Therapeutic Gazette.

FORTY YEAR'S EXPERIENCE IN THE USE OF CHLOROFORM is the caption of an article by Dr. Lombe Athill, ex-master of the Dublin Rotunda Hospital, reprinted from the British Medical Journal by the Canadian Practitioner February. He makes an estimate that he has administered chloroform 17,000 times with only one death. This death he does attribute entirely to the anesthetic. It was the case of a woman with a very large ovarian cyst. After she made two or three inhalations the anesthetist exclaimed that

she had ceased breathing. Artificial respiration was begun, but one of the by-standers exclaiming "lower her head," this was done. Some one seized her legs and elevated her pelvis, while another pulled her shoulders off the table till her head almost touched the floor. The effect of this was that the huge tumor pressed against the diaphragm so powerfully that she could not breathe. Too much zeal by the by-standers in the wrong direction, too much zeal by Dr. Athill for chloroform, possibly too much zeal by us in publishing those items that favor the anesthetic of our choice. It is anesthesia that is always dangerous, whether it be by whiskey bichloride methyl, nitrous oxide, ether, chloroform: the patient who is suspended between life and death in this wonderful condition of abolished sensations, must be in safe and experienced hands, and by-standers should not be allowed.

A PHYSICIAN'S ESTIMATE OF HIS CLASS.—In Dr. S. Weir Mitchell's interesting "medicated novel," "Characteristics," that is being published in the Century, there is the following description of varieties of medical men that will suggest acquaintances to many of our readers: "There is no place where good breeding has so sweet a chance as at the bedside. There are many substitutes, but the sick man is a shrewd detective, and soon or late gets at the true man inside of the doctor. I know, alas! of men who possess cheap manufactured manners adapted, as they believe, to the wants of 'the sick room'-a term I loathe. According to the man and his temperament do these manners vary, and represent sympathetic cheerfulness or sympathetic gloom. They have, I know, their successes and their commercial value, and may be of such skillful make as to deceive for a time even clever women, which is saying a great deal for the manufacturer. Then comes a rarer man, who is naturally tender in his contact with the sick, and who is by good fortune full of educated tact. He has the dramatic quality of instinctive sympathy, and, above all, knows how to control it. If he has directness of character too, although he may make mistakes (as who does not?), he will be, on the whole, the best adviser for the sick, and the completeness of his values will depend upon mental qualities which he may or may not possess in large amount. But over and above all this there is, as I have urged, some mystery in the way in which certain men refresh the patient with their presence. I fancy

that every doctor who has this power-and sooner or later he is sure to know that he has it-also learns that there are days when he has it not. It is in part a question of his own physical state; at times the virtue has gone out of him. I had a rather grim but most able surgeon. He seemed to me to have a death-certificate ready in his pocket. He came, asked questions, examined me as if I were a machine, and was too absorbed in the physical me to think about that other me whose tentacula he knocked about without mercy, or without knowledge that tenderness was needed. Our consultant was a physician with acquired manners. He always agreed with what I said, and was what I call aggressively gentle; so that he seemed to me to be ever saying, with calm self-approval, 'See how gentle I am.' I am told with women he was delightfully positive, and I think this may have been true, but he was incapable of being firm with the obstinate. His formulas distressed me, and they were many. He was apt to say as he entered my room, 'Well, and how are we to-day?' And this I hated, because I once knew a sallow undertaker who, in the same fashion, used to associate himself with the corpse, and comfort the living with the phrase, 'We are looking quite natural to-day."

Vaccination is the title of the leading article in The Journal of the American Medical Association February 20th, by Dr. W. H. Washburn, of Milwaukee. How much such articles are needed may be judged by the great ignorance that exists in regard to this only known prophylactic. The medical profession of this country is in good condition to accept the anti-vaccination volumes of Crookshank, and Dr. Washburn does good service in restating the whole subject of vaccination—historical, pathological, prophylactic, statistic—to remind the profession of the old landmarks. We noticed one good sign at the meeting of the American Medical Association in Washington last May, the two elegant volumes of Crookshank were being closed out by the American publishers at a nominal price, the inference being that they have not impressed the reading public favorably.

DR. HENRY I. BOWDITCH.—The death of this venerable pioneer in sanitary thought recalls to us of this generation his epochal paper "On Soil Moisture as a Cause of Consumption." He was \$4 years

old when he died, his life having spanned a period of great advancement in American medicine, in much of which he was a leader or a co-laborer of earnest workers. His presence at the conferences of the Boards of Health which led up to the organization of the National Board of Health, is remembered by the writer with much pleasure. He had a place in his heart big enough for all sections of this great republic.

SPECTACLE ITINERANTS WHO PRACTICE WITHOUT LICENSE ARE ILLEGAL PRACTITIONERS.—One who prescribes spectacles for the rectification of defective vision is as liable to the law for practising medicine as one who prescribes drugs or gives any other medical advice. The New York Medical Record, February 20th, says such was a decision recently in a Havre court. Surely what is good law in France must be good law everywhere else.

THILANINE.—"This is a new modification of lanolin, obtained by Liebels by the action of sulphur on lanolin, and which is stated to be a definite compound. Dr. Sadlefeld, of Berlin, has experimented with it in his dermatological practice, and reports very favorably on its action in various affections. It gives rise to no irritation and allays all itching, and is said to be destined to supersede Hebra's ointment in dermatological work."—British and Colonial Druggist.

RICORD'S EPITAPH.—In an interesting address on Ricord, delivered at the annual meeting of the Société de chirurgie by the Secretary-General, M. Monod, which is published as a feuilleton in the Union médicale, we are told that M. Ricord had, long before his death, made careful preparations for his interment, and had written his own epitaph, which he often read to his friends, and with which he seemed to be pleased. The lines are as follows:

Aux portes de l'Eternité, Quand j'aurai fini ma carrière. S'il me reste un peu de poussière De cette triste humanité, Que le tombeau seul s'en empare; Que de mon âme se sépare Cette cause de mes douleurs; Car l'âme pure et sa matière Doit être un rayon de lumière Que ne troubleront plus res pleurs.—N. Y. M. J. St. Luke's Hospital, New York, is to be removed to 113th St., in immediate juxtaposition to the Cathedral of St. John the Divine. The medical profession has warm-hearted praise for the management of St. Luke's

WILL ANY OF OUR READERS help us out in the following inquiry:

"Rosindale, January 25.
"Dear Doctor:—Do blowing a harp injure the eye-sight?
"Yours, truly,

"-----,"

Common Thyme in Whooping-Cough.—Common thyme, which was recommended in whooping-cough three or four years ago by Dr. S. B. Johnson, is regarded by Dr. Neovius, who writes a paper on the subject in a Finnish medical journal, as almost worthy of the title of a specific. During an epidemic of whooping-cough he had ample opportunities of observing its effects, and he came to the conclusion that if it is given early and constantly it invariably cuts short the disease in a fortnight, the symptoms generally vanishing in two or three days. They are liable to return if the thyme is not taken regularly for at least two or three weeks. He gives from one ounce and a half to six ounces per diem, combined with a marshmallow syrup. It may produce a slight diarrhæa. It is quite important that the drug should be used quite fresh.—Amer. Jour. Med. Science.

TREATMENT OF SENILE GANGRENE.—Heidenhain (Deutsche med. Woch.) gives the results of treatment in 30 cases of senile gangrene, many of them in diabetic patients; and draws attention to the importance of ascertaining whether, in addition to the arteriosclerosis and atheroma, there is thrombosis of any artery in the lower limb. To such thrombosis the recurrence of gangrene after amputation is probably frequently due. He proposes to divide these cases of arteriosclerosis and senile gangrene, especially in diabetics, into two groups, according to the etiology. The first group would include cases in which gangrene sets in after some slight injury, where sclerosis, possibly assisted by the saccharine state of the blood, sets up gangrene by interfering with the circulation. To the second group are to be assigned those cases—proba-

bly more numerous than the first—in which gangrene, although apparently spontaneous, is in reality due to previous thrombosis of some artery in the popliteal space or in the leg. Heidenhain's experience in treating these cases leads him to make the following recommendations: Where the gangrene is limited to one or two toes, avoid surgical interference; when, on the contrary, the gangrene has reached the metatarsal region, amputate through the femur above the condyles, taking care to cut as small skin flaps as possible. Greater success attends such high amputation than where an operation is performed lower down.—Supplement to the British Medical Journal.

DR. JAMES STUART DEVANE died during January at his home on the Cape Fear River, in Bladen county, of epidemic influenza. He had practiced in the same neighborhood for many years under the most discouraging circumstances, Farmer Stuart feeding Dr. Stuart, as we so often know is the case with many country practitioners. One of his neighbors said of him after his death, that a great objection to Dr. Stuart was that he would neglect a paying patient to go to a charity case, and often abandoned everything else until he had done his utmost for the poorer neighbor. The community he served sorely misses his services. Dr. Stuart was a man of good education, enjoying far more the pleasures of polite learning than the literature of his profession. The editor of the Raleigh News and Observer says of him: "Dr. James Stuart Devane, who has recently died in Bladen, was a descendant of the House of Stuart of Scotland. After the battle of Culloden, Wm. Stuart fled to France, where he married into the DeVane family, and subsequently emigrated to America. He was the ancestor of Dr. DeVane."

SUBCUTANEOUS USE OF ERGOTIN.—Dr. Driver (Therp. Monatsh.) says that acute hæmoptysis coming on suddenly and due to erosion of large vessels cannot be stopped by any injection of ergotin, but that the cessation is brought about by the coagulation of the blood unthe cavity acting as a tampon. Absolute rest and the controlling of the cough by morphine are necessary. There is no object to be gained by the icebag, and the inhalation of astringents is harmful. In cases of continued capillary hæmorrhage from the walls of the cavity (which must be looked upon as due to a congestive hype-

ræmia), the author says that combined with measures to increase the heart's action, ergotin is almost a sovereign remedy. The dose used is generally too small. If the bleeding is severe 0.5 to 1.0 g. should be given. After disinfecting the syringe the required amount of ergotin (Bombelon) is taken up, and the syringe filled with distilled water or a very weak solution of carbolic acid or morphine. This is injected after the skin has been thoroughly cleansed. In this way no inflammation or suppuration will arise.—
Sup. to Brit. Med.

SIR MORELL MACKENZIE, M.D., died on the 3d of February of asthma. He was for a long time a sufferer from this disease. An attack of influenza in November intensified his old enemy the asthma, he became much worse on the 19th January, and died with syncope after a fit of coughing. He was born in 1837. He was of Scotch extraction. His visit to Pesth, and his acquaintance with Czermak, who had just made practicable the laryngoscope discovered by Garcia, inclined Mackenzie to the specialty which he pursued in after years with such distinguished ability. His knowledge of the laryngoscope, and his skill in teaching its use, attracted students to him from all parts of the world, and established the practice in Great Britain. His contributions to the science and practice of laryngoscopy, including laryngeal surgery, are very great, and when we consider that these volumes were produced in the hours he could spare from an enormous private practice and hospital service, the real amount of labor will be apparent. His notoriety during the treatment of "Frederick the Noble" is the least attractive part of his brilliant career, but his perplexities were great and the jealousy of his enemies irritating in the extreme. Peace be to the ashes of one who added such great gifts to his profession.

BACK AGAIN TO THE APPRENTICESHIP SYSTEM.—In addressing a British medical society, Dr. Orlando Jones (Brit. Med. Journal, January 9, 1892), in suggesting improvements in the public standing of the medical profession, says: "In the first place, I think that the tone of the profession might be raised by the introduction of a law enforcing at least one year's apprenticeship before the commencement of the ordinary course, during which time the compounding of drugs and other preliminary work could be studied,

which would be of great benefit to the profession in various ways.— Maryland Medical Journal.

Dr. R. F. Licorish, of Bridgetown, Barbadoes, is an occasional contributor to the Medical Record

FARADIZATION IN INCONTINENCE OF URINE.—We read in the Archives of Gynaecology that Dr. James reports a case of incontinence in a girl aged 15, where internal medication had failed of any result, in which a complete cure was obtained by faradization of the methra—the negative pole in the urethra, and the positive on the thigh.—Maryland Med. Jour.

AMENORRHEA OF SCHOOL-GIRLS.—Dr. T. A. Reamy (Cincinnati Lancet Clinic), in discussing the amenorrhea in anamia, common to school-girls, says: (1) She must leave school, and must not even study at home. (2) She must spend several hours each day in the open air, either walking or riding. In winter she must of course be warmly clad, but must wear no sheepskins or other chestprotecting pads. Standing in the open air, she must be induced to breathe deeply with the mouth closed; this should be done for at least fifteen or twenty minutes, and be repeated at least twice a day. Nothing that can be done will more rapidly improve the character of her blood. (3) She must sponge her extremities and body each morning on arrsing from bed. The water must be of the temperature of the room, and she must practice friction freely with an ordinary towel. (4) She must drink plenty of milk and eat plenty of beefsteak. (5) She must take small doses of iron, combined with some bitter tonic, three times a day. Improvement may be somewhat slow, but if this course is faithfully carried out, a perfect cure will result, and her education may then be finished. If this course or its equivalent be not followed, these cases will go from bad to worse, and finally die from pulmonary tuberculosis .-Arch. Gyn. Obs. and Ped.

TREATMENT OF PNEUMONIA.—In the Edinburgh Med. Journal for November, 1891, Dr. George W. Balfovr writes: (1) There is no true specific for the cure of pneumonia. (2) That a favorable ratio of recoveries to cases does not indicate any specially curative virtues in the remedy employed, but merely a concatenation of

favorable conditions in the cases treated, and this may be either accidental or the result of careful selection. (3) That the remedy which most deserves our attention is one capable of relieving the most distressing symptoms tuto, cito, et jucunde. This observer thinks that a purge to clear "a dirty tongue" in the early stage of pneumonia is more harmful as a depressant to the heart's action than beneficial to the digestive tract. There are two conditions to be guarded against: 1st, excessive consolidation of the lung-substance, and, 2d, excessive temperature. The latter is especially formidable. When the temperature is not high, consolidation offers no great impediment to the heart's action and can be readily handled. After trying many ways of treatment he concludes that the sleenlessness, pain and cough of pneumonia are best met by digitalis and chloral. He gives digitalis as an infusion together with Liebreich's chloral dissolved in it, the dose for an adult being 20 grains of chloral in half an ounce of infusion every four hours. After the first, second or third dose the chloral could be reduced one-half, continued until the temperature became normal, and then replaced by a tonic. Locally, a jacket-poultice or cotton wool proves very useful. The diet should be earefully arranged. Under this treatment the crisis is well marked, the heart's action carefully nursed, and the patient made thoroughly comfortable,-Inter. Med. Magazine.

"The Good Bed-side Manner."—The true basis of the good bed-side manner is a large heart. Some expansiveness of the intellect is undoubtedly an advantage, but a humane and sympathizing nature outweighs all other qualities. The late Dr. Fordyce Barker has left a name as being one of the most winsome of the clinicians of his day and generation, and it is partially from the reflection that we do not know his exact peer, that this pen has taken up this theme. The ages or generations repeat themselves measurably, and other Barkers have been and will be, but our present feeling is that a bright and shining light has been extinguished. He would not have styled himself a physician of the old school, but such he was, however, to the extent of not yielding up all of sympathy to the utmost of science. He, at no part of his career, failed to have a winning way with his patients, and seldom did any physician inspire so complete a confidence. But as years revolved he became even

more tender. His kindly courtesy was not reserved for the rich alone. On more than one occasion he has been known to bend over and kiss upon the forehead some poor woman in the hospital, who had been the patient subject of a serious operation. It was the impulse of the moment and an unmistakable index to the largeness of his heart; a passing benediction, as if one had said, "God bless you and heal you, my child." A very winsome man, as a surgeon. was Willard Parker, who passed away from a busy life in 1884, generous and benevolent, even to a fault. That is to say, his stream of human kindness he would not stop even if some of it helped to refresh the undeserving. He was wholesome in appearance, brighteved and hearty; his mere advent was a blessing to many a despondent sufferer, and he seemed to serve as an embodiment of one of his favorite doctrines, that, "after all, health is more interesting than disease, and a more important concern, both to the doctor and the patient." On one occasion he had been called into the country to visit an eminent senator of the United States. Hurrying from the railway station to the home of the patient, he tarried not to be announced, but bounded up stairs, two steps at a time, to be at once welcomed with, "Why, is that you, Dr. Parker? I declare, I feel better already." He was one of those who form a living answer to the captious question of the skeptic, when he asked, "And why has not God made health contagious as well as disease?" There are infectious properties of soul-as charity, fortitude, good humor-which react in a saving way upon the corporeal parts of men. Cheerfulness is in some sense a duty imposed upon the practitioner, which, aided by the "light address," the hilaris vultus of Celsus, has the power of inspiring confidence. The impression which it conveys is that the professional man is the possessor of abundant resources and is the master of them. In this view of the case, some of the early law-givers, as in the reign of Henry VII, must have erred when they sought to legislate a sad countenance upon the healing fraternity. A statute of that reign ordained that the practice of medicine should be limited to those persons "that be profound, sad and discreet, grandly learned and deeply studied in physic." . . . In the Hospital Gazette is given the following incident, said to have been related by Sir Richard Quain, of Dictionary fame, which gives point to our moral: He had been in attendance upon the wife of an old patient, and at one of his visits

the husband set the doctor to thinking with the remark: "I greatly appreciate the anxiety you feel for my poor wife, but do not let her see it again, for after you left the room she asked me if you were the undertaker." . . . There is an old book, the "Anatomie of the Bodie of Man," written by Thomas Vicary, chief surgeon of St. Bartholomew's Hospital from 1548-'62, which shows that medicine has in the earlier times claimed the allegiance of noble-hearted and clear-speaking men. It says that the doctor must be learned, must know his principles, be seen in natural philosophy, in grammar, must speak congruously in logic, speak seemly and eloquently, know things natural and non-natural, and above all, be good-looking-for whose face is not seemly, it is impossible for him to have good manners. The "good looks" here advocated by the ancient surgeon, imply not so much the fine features of physical beauty as of the countenance irradiated by good feeling and good deeds. Mr. Robert Louis Stevenson, in his book called "Underwoods," says: "Generosity the physician has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments, and what are more important, Herculean cheerfulness and courage; so it is that he brings air and cheer into the sick-room, and often enough, though not as often as he wishes, brings healing." Dr. Weir Mitchell, in the current number of the Century, has given some graphic sketches of the bad traits of practitioners at the bedside. They may be found in "Characteristics', (a thinly medicated serial), where he speaks briefly of the man who is by nature tender in his contact with the sick, but also of the imitation sympathizer who does not long impose upon the sick; "for there is no place," he says, "where good breeding has so sweet a chance as at the bedside. There are many substitutes, but the sick man is a shrewd detective, and soon or late gets at the true man inside of the doctor."-Jour. Amer. Med. Asso'n.

[&]quot;QUIZ" CLASS FOR CANDIDATES FOR THE LICENSE OF THE STATE BOARD OF MEDICAL EXAMINERS IN MAY.—Dr. J. P. Munroe, of the Davidson Preparatory Medical School, opens a "quiz' class for physicians who intend to be candidates for the license of the Board of Examiners next May. His term lasts from April 1st and the fee is \$25.

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No. 3.1

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M.D., GEO. GILLETT THOMAS, M.D.,

Number 3. Wilmington, March, 1892. Vol. 29.

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF TYPHOID FEVER.

By Robert C. Kenner, M.D.

(Read before the Mississippi Valley Medical Association at St. Louis, October 15, 1891.)

The treatment of typhoid fever in a manner that will lessen the mortality and abbreviate its duration is, in the present state of our knowledge, the best thing possible in the power of the physician.

It shall be my object in this paper not to discuss the relative merits of a great many modes of treatment which have found favor with various observers all over the world, but to direct the attention of the profession of the Mississippi Valley to some important measures which have the endorsement of the most painstaking clinicians of Europe and America, and which, by the results attained seem to make clear the way to us who strive to render the greatest possible assistance to those whom we are called to treat. Let us examine the various demands of a case of typhoid fever, and discuss the measures which are appropriate and indicated. The room which the patient occupies should be light and the temperature carefully noticed, that it may become neither too cold nor too warm. The bed should be placed so that light will not fall directly in the patient's face, and everything should, as far as possible, be arranged so as to contribute to his comfort. The nurse should be impressed with the great importance of the patient remaining in the recumbent position in bed. The tax upon the strength from the least exertion is so great as to make heart-failure possible and probable. To the neglect of this is to be charge I the death of many patients who were convalescing fairly. In his lectures the late Prof. T. S Bell used to insist on this with some enthusiasm, and cited several cases where he had known death from this cause. A patient should not be allowed to lie too long on his back. The danger from hypostatic pneumonia may be obviated by having them to change from side to side occasionally, and not allowing him to remain for a great while on the back. Some nurses are not acquainted with the fact that pneumonia is often eaused by allowing their patient to lie near an open window. Many deaths, I am persuaded, are caused by not observing this important rule. Another precaution which Dr. Hutchinson enjoins, and which is of great importance, is that the patient should not be allowed to go out until his strength has been regained to such an extent as to warrant it. The habit of allowing patients to go about who have only a few days prior ceased to have fever, can only leave open to him numerous sources of danger, which it is altogether possible may undo all our work and wreck him.

The question of diet is one of the very greatest importance, since starvation is one of the greatest dangers in this disease. Fenwick (quoted by Prof. Thompson in his paper) has shown that in typhoid fever the stomach loses half its bulk; that its functional activities are very greatly diminished, and that it produces less gastric juice than it does in those patients who die of phthisis. This ought to teach us to avoid all solid food, and to assist the weakened organ all we can by the administration of liquid diet and the proper amount of pepsin. In doing this, one—and I regard it the best article of diet—is milk. Prof. Thompson thinks it should be

diluted-on accout of the aforesaid debilitated condition of the stomach-with one-half of the quantity of lime-water. I agree in this, and use it in this manner. I think the lime-water exerts an antiseptic effect on the intestinal tract and is most valuable. It is my practice after each taking of milk to have the patient administered a dose of lactopeptine, which assists the stomach in the process of digestion and materially strengthens our patient. This I regard as very important, and I see that it is carefully followed. Some patients cannot or will not take milk, and in these instances we are compelled to use some of the food products offered us by manufacturing chemists. The liquid beef peptonoids have afforded me good results, and I feel that some of my patients would not have recovered but for their use. The quantity of milk which should be taken is quite important. Dr. Hutchipson says that "Most adult patients will be able to take from a quart and a half to two quarts daily, in quantities of from four to six ounces every two or three hour ." I believe this amount sufficient, and consider my patient on safe ground if he can take this amount and digest it. The proper and timely use of stimulants afford the most positive and valuable assistance in the management of this disease. Prof. W. H. Thompson's principle of the administration of stimulants is so correct that I may be permitted to quote his words: "The bighest point of vital power is about 10 a.m. and the lowest about 2 a. m., and between these two poles the pendulum swings from the full activity of the forenoon hour to the decidedly lessening strength of evening, until it reaches the fall of the last of all functions to vary, namely, the bodily temperature, frequently in good health, amounting to over a degree and a half, between 2 and 5 o'clock in the morning, often causes us to awaken and increase our bedcovering. These variations are still more strikingly illustrated in disease, as witness the first appearance of night-sweats in phthisis, and the most frequent time of onset of looseness of the bowels in chronic diarrhea. It is, therefore, my practice to direct that stimulants should at first certainly be given in typhoid only after midnight; afterwards, as weakness progresses, in the evening, and earlier than this only as the indications are unmistakable for them. When given, also, an ounce every three hours of whiskey is better than twice that amount administered in half-ounce doses every half hour. Meantime the forenoon is the time to push feeding, rather

than to increase the administration later on, because the patient then seems weaker." It is important that the physician see that the nurse fully comprehends the demand for stimulants. The rule which I strive to have a nurse comprehend is that the pulse must be kept full and regular, and that it is not the regularity of administration that will bring this about, but that a sufficient quantity given often enough will only accomplish it. Late in the night. when the vital forces are lowest, I am sure I have seen the issue of life turned in the favor of the patient by a wise administration of stimulants. I give, as I shall later on describe, wine or whiskey, while the patient is in the bath, when the patient is to be lifted upon the stool, or is called upon to make the least exertion. I believe it important to reinforce his strength by the administration of stimulants. I of course refer to the use of alcoholic stimulants. The best alcoholic stimulant to be employed is a matter not hard to settle. The preference of the patient generally determines me in these instances. I usually prescribe whiskey or French brandy, but wines answer the demand as well. With the use of camphor as a cardiac stimulant I have not had experience, though it has been lauded by several German clinicians. Dr. Hutchinson lays stress on the point of water-drinking in this disease, and reminds us of the importance of water in this disease where there is so much combustion, and that it is a diuretic of great value. I have not forgotten this in the treatment of my patients, and have charged nurses to give it regularly to patients who were unconscious, or who did not call for it. There can be no reasonable doubt that we do a most necessary thing for our patient in bringing about intestinal antisepsis if that is possible. Prof. Thompson says: "It has been estimated that the quantity of the secretions which are daily poured into the alimentary canal by its apparatus of glands is equal in bulk to the mass of the blood itself, nearly every part of which is reabsorbed into the circulation This great flow and reflow of secretion, indeed, might be called a second circulation to that of the blood itself, and we can readily see how, in the sojourn of the fluids in the stomach and bowels, every chance may occur for the entrance into the systemic circulation of enough neurotic poisons to produce most symptoms of the disease, both of a nervous and muscular kind, as well as originate a great variety of the familiar sequelæ of this fever. Upon every rational ground, therefore, intestinal antisepsis seems to be indicated in typhoid fever." Prof. Thompson regards subcarbonate of bismuth as the best intestinal antiseptic, and there can be no question that it is valuable, and it is, as he says, mild and unirritating.

I, however, rely most on salol, having fou id it most valuable, not only to produce intestinal antisepsis, but to relieve the tympanites. It is my custom to have my patients 'ake 15 grains of salol per day, and a greater amount than this if there is much tympanites. This practice has rendered me, I feel sure, much service, and I think one of the most important indications is to use this agent, which I think possesses advantages over all others for the production of intestinal antisepsis. The fact that cases of typhoid fever all over the Mississippi Valley are more or less complicated with malaria, and because quinine in small doses exerts a tonic and supportive influence, it is my custom to give from 3 to 6 grains daily to my patients. I usually order it and the salol put into a capsule in the proportion of 5 grains of salol and 1 or 2 grains of quinine. This is administered three times daily.

Diarrhea is often a troublesome issue of this fever. Before I began the use of salol, as above indicated, I was more annoved than I am now about the diarrhea. Salol is itself one of the best remedies we possess for the control of this symptom. I generally prescribe bismuth subnit and pepsin, when this becomes too severe. The indication for turpentine, as laid down by the late Prof. Wood, was when the tongue became dry, and it without question yields us great good in these cases. The use of antipyretic drugs were several years ago very popular, but they are now losing their following. "These agents are," to use the words of Prof. Thompson, "one and all muscular paralyzers." They relieve the symptomfever, but they exert a pernicious influence on the heart, and in that they weaken it-an organ which in this disease can with little judgment be taxed further. For this reason I have ceased to employ these agents, and I believe the voice of the profession of the world is against their use. I have not considered it necessary to take the time to enter upon an account of the objections against these drugs individually, or give any extended list of reasons why their abandonment has been begun by the profession, believing that you are familiar with these reasons.

I have waited until the last to discuss the merits of what I con-

sider the most important part of the treatment of typhoid fever I refer to the treatment by cold bath as used by Brandt of Stettin. The treatment by the cold bath was used by James Currie, whose name is imperishable, both in the annals of medicine and literature. He was the biographer and friend of Robert Burns. But to Brandt we are indebted for the systematic manner of treating this disease by the cold bath. He gave the practice its present impetus, and pointed out its superiority over all other modes of treatment.

Those who have given the treatment the severest tests claim that it tends to strengthen the patient, and that complications are less likely to occur, and of course the duration must be shorter. In the earliest edition of his work on therapeutics Prof. Wood truly says: "All those physicians who advocate the use of cold baths in typhoid fever and typhus fever appear to be agreed that, although the mortality is very much reduced, the duration of the disease is shortened only in so far as complications are avoided. As, however, the patient is left by the disease much stronger than he is when the expectant method of treatment is pursued, convalescence is much more rapid than under the old plans.

By the antipyretic treatment the intense prostration, delirium, stupor, carphologia, involuntary passages and other manifestations of the typhoid state are greatly lessened. The relief afforded is so evident to both patient and attendants that they usually, after one trial, acquiesce in the regular employment of cold baths, although to the one the senations are at first very disagreeable, and for the other the labor and attention required are very much increased. The antipyretic use of cold in typhoid fever has not, however, been free from determined opposition (see discussion in Le Progrés Med., 1877; also Bull Therap. xci), and the assertions in its favor are evident exaggerations. I am, however, thoroughly convinced by my own experience, as well as by the great mass of recorded evidence, that the treatment of typhus and typhoid fever by cold is of the utmost value, and I believe that the cold bath is much safer and more efficient than are antipyretic drugs. In America the method has met with comparatively little favor, chiefly because of the labor it involves and of the prejudice of the laity. I have no doubt that very many persons have died in the United States of typhoid fever whose lives would have been saved if the American medical profession had risen above the opposition of the laity and above its own prejudice."

A fair way to decide the value of this treatment, Dr. J. C. Wilson says, "is to determine first what effect it has on the course of the disease, and secondly what percentage of mortality follows it" There can be no doubt that if, under these tests, this plan of treatment is able to make good showing, that it is destined to receive the confidence it demands.

The temperature when this plan of treatment is employed never reaches a high point, and the danger from this source is brought low. The circulation is better—the digestion is improved—diarrhœa is rarely a troublesome quantity—cerebral troubles are rarely present, and, to use the words of Dr J. C. Wilson, the "classical picture of typhoid fever is no longer seen; that there remains of ordinary typhoid more than (a) a moderate fever; (b) an unimportant bronchial catarrh; (c) enlargement of the spleen; (d) the rose rash, and (e) infiltration of the intestinal glands. Everything else is prevented, and what might have been a severe case runs its course as a mild one, if the patients are brought under treatment sufficiently early. Exceptions to this statement occur only when complications develop at the onset."

This must not be regarded in any sense a picture which has been drawn to colorings of too bright a hue; I have observed and regarded them in my own practice. For the last four years I have constantly employed this treatment whenever the patients would allow me, and I have witnessed the results claimed by these authors.

As to the mortality which follows this treatment, I can say that nothing greater could be said in its praise than reading the results which have been attained by those who have tried it on a large scale. Prof. Wilson, of Philadelphia, treated in sixteen months 160 cases, with a loss of only 8. Dr. Wilson quotes from the reports of the Brisbain Hospital an illustration of the great value of the treatment. (Prof. Wilson in *Int. Clinics*, July, 1891)

(1) During the period from May 15, 1882, to December 31, 1886, there was treated 1,828 cases with 271 deaths. This large percentage of deaths occurred under the expectant plan—or the treatment was largely this—nothing like the Brandt method being employed. From (2) December, 1886, the cold bath treatment was regularly and systematically employed. The number of cases treated was

1,173, with a mortality of only 92." To quote Prof. Wilson's words: (3) "Under the bath treatment there was an improvement in the hospital mortality amounting almost to 50 per cent."

Relative to the brilliant results which have been attained by Continental clinicians, allow me to quote from Prof. Wood (Wood's Therapeutics, 1891, page 66): "It is stated by Wenternitz that in the French and Austrian armies the antipyretic treatment by cold has not been employed, while in the German army it is practiced more or less zealously. The mortality in the French army averages 36.9 per cent., in the Austrian 27.4, and in the German only 9.6. That this decreased mortality is due to the antipyresis seems to be established by the fact affirmed by Brandt, that in the Second German Army Corps, in which the treatment is carried out more thoroughly and systematically than in the other corps, the mortality is less then 4 per cent., and that, too, in face of the fact that in the same hospitals, from 1849 to 1856, the mortality was 26 per cent. Jurgensen states that from the year 1850 to 1861 there had been treated in the hospital at Kiel, according to the expectant method, 330 typhoid fever patients, with a mortality of 15.4 per cent; while from 1863 to 1866, during which period the antipyretic method was employed, in 160 cases the mortality was 31 per cent. Prof. Liebermeister has employed the cold-water treatment on a larger scale than has any other individual. At the hospital at Basel, up to the year 1865, 1,718 cases of typhoid fever were treated upon the expectant plan with a mortality of 27.3 per cent. In 1865 Dr. Liebermeister introduced the use of cold bathing in a timid, inefficient manner, and reduced the mortality, in 982 cases, to 16.2 per cent. In 1886 he began the vigorous regular employment of the method, and reduced the death-rate in 1,121 patients treated to 8.2 per cent," This will give my hearers a full estimate of the value of this treatment by those who have tried it extensively and who are most capable of judging. In my own practice, owing to great popular prejudice against cold baths, I have not seen able to employ it in all my cases. Yet for the last four years I have made it my reliance whenever I was allowed to use it. In this time I have treated 60 cases with a loss of only 2 patients. Prior to the time I began its employment my mortality was like all those who depended on the expectant plan. I fully concur with Dr. Wilson that it improves the general condition of the patient,

that complications occur less often, and that the mortality is greatly lessened. The contra-indications for the use of the cold bath are very few. Extreme prostration, and those cases which, on account of extreme cardiac weakness-threatened collapse-intestinal hemorrhage, are cases in which I withhold the bath. I also have not allowed women bathed who are menstruating, though some observers do not regard this as a contra-indication. Concerning the means of employing the cold bath I must speak. A bathtub must be brought up to the side of the bed, with enough water in it to cover the patient. The tub should be long enough to allow the patient to lie down, and a pillow should be provided for him to rest his head upon. He should be lifted into the tub, and on no account allowed to get into it himself or exert himself in any manner. He should be allowed to remain from ten to twenty minutes. The water should be from 65° to 70° F. During the bath he should be rubbed by the attendant, and given a drink of wine if he exhibits the least signs of collapse. I am in the habit of giving a drink of wine before the patient is bathed, and feel that it is a good practice. The patient should be bathed about every four hours or oftener, if the temperature rises above 101° F. I believe the regular four hour bathing keeps down the rise of temperature. and that it is not wise to always wait for a considerable temperature elevation. His head should be wet with water of even lower temperature while he is in the bath.

STYRONE IN CHRONIC SUPPURATIONS OF THE EAR.—In the Archives of Otology for July, 1891, Dr. Spalding reports on the value of styrone in the obstinate cases of this affection, especially those complicated by attic-inflammation and perforation in Shrapnell's membrane. The fluid styrone, which is much less costly than the crystalline, was found efficacious, being used in alcoholic solution of two to five per cent., diluted at the moment with water or glycerin. Cleansing by syringing and mopping with cotton should of course, precede its application, which is best made with the moistened pledget on the cotton-carrier. Boric acid insufflation may follow.—Therapeutic Gazette.

SUCCESSFUL TREATMENT OF MEMBRANOUS CROUP WITHOUT TRACHEOTOMY OR INTUBATION.

By John B. Turner, M.D.

(Read before the Philadelphia County Medical Society, February 10, 1892, Dr. L. K. Baldwin in the chair.)

The class of cases to which I refer are of laryngitis with fibrinous exudation and not complicated by diphtheria. My experience before February, 1891, covering a period of nine years, was to have treated medicinally 8 cases, 6 of which died, showing a mortality of 75 per cent.

The results of tracheotomy in the practice of my medical friends having been so unpromising (all the patients dying), I did not at any time see fit to have the same tried in my practice. As to intubation, my experience is small—2 cases, toth dying. I condemn tracheotomy and intubation with true croup, as the same objections obtain in both, viz: that the accumulation of muco-pus in the lower part of the trachea and in the bronchi is lost sight of Paralysis of the posterior crico-arytenoid muscles, preventing dilation of the glottis in inspiration, is a symptom no doubt relieved by tracheotomy and intubation, but the other paramount elements of danger in the case, as pneumonia, capillary bronchitis, accumulation of muco-pus, feeble expiratory efforts preventing expectoration, due to general debility and exhaustion, are unremedied.

The treatment I have used since February, 1891, is based upon the allaying of inflammation about the site of the membrane, effecting the separation of the membrane, lessening the formation of new membrane, effectually controlling laryngeal spasm and sustaining the strength. I use asafætida by suppositories to allay spasm and to give needed intervals of quiet, restful sleep, and consider it a valuable and much overlooked remedy in membranous croup.

For the other conditions or symptoms I used ammonium chloride given in syrupy mixture without water, as the addition of water makes it unpalatable to children.

In Wood's Reference Handbook, in an article written by Dr. Nickles, of Cincinnati, "Wibmer found a very decided increase of the bronchial mucus after hourly doses of 8 to 15 grains of ammonium chloride, and other careful observers noticed the same effect.

Experiments of Rossbach seem to show a different mode of action. Under the influence of the salt, the tracheal mucous membrane became anemic and the secretion of mucus gradually ceased. The utility of ammonium chloride in catarrh of the air-passages may therefore depend upon a favorable modification of the vascularity of the mucous membrane, not merely upon a change of the quantity of the secretion." I am of the opinion that Rossbach's view is the more probable one regarding the action of ammonium chloride, and will better explain its beneficial action upon the catarrh accompanying croup

I will now give the details of the treatment pursued in my last four cases, and advocate it as one simple, humane and easily applied:

Case 1.—On February 16, 1891, I was called to see Sallie B., aged 11 months, who was suffering from a severe attack of membranous croup. The mother had lost two children on former occasions by the same disease, one in twenty-four and the other in thirty-six hours. Why croup has a predilection for certain families I am at a loss to know.

I had the child taken to the Children's Hospital, and Dr. Samuel Ashhurst confirmed the diagnosis and recommended tracheotomy, which was refused by the mother. When the child was brought from the hospital to her home I gave the following treatment:

B.—Ammonii chloridi	3 j.	
	f ℥ ij–	-M.

S. Half a teaspoonful every two hours.

R.—Asafætidæ pul	gr. xvi.
Quininæ sulph	gr. iv.
Codeinæ	
	gr. exxx.—M.
Figt suppos no r	9

S. One every four hours.

The child did well (the attack lasting eleven days) and recovered. The patient received whiskey and milk at regular intervals, and was kept in a well-ventilated room. By this treatment the appetite remained fairly good, and the strength was sustained. The same child had another attack on December 18, 1891, and by the same treatment was restored to health. I call this second attack Case 2.

Case 3.—John D., aged 18 months; attacked on August 26th. Same treatment, and child recovered on the eighth day. The mother poulticed this boy on chest and over trachea, of which action I approved.

Case 4.—Henry J., aged $2\frac{1}{2}$ years; attacked March 6th. Disease lasted one week. Recovered by means of same treatment. This case received larger doses of the ammonium chloride mixture because of his being older than the other children.

There was no atomization used on these cases.

DISCUSSION.

Dr. Edwin Rosenthal: It seems to me extremely strange that such a disease as membranous croup should be so easily remedied by muriate of ammonium and asafætida suppositories. In a series of some 420 odd cases which I have followed and studied, in my own practice and in the practice of my friends, which were not treated by intubation or tracheotomy, and in which the diagnosis is undoubted, but three recovered. In 64 cases that I have intubated fully one-half died. Many of these cases had been previously treated by muriate of ammonium and also by chloral, which I consider a better antispasmodic than asafætida. Chloride of ammonia has been long used in this disease. It was recommended by Dr Condie-one of our earliest members-for membranous larvngitis, and its action, which, if I remember correctly, was to defibrinate the blood, prevent the pseudo-membrane from forming, and facilitate the absorption of tissues already formed. If Dr. Turner considers membranous croup one disease and diphtheria of the larvnx another disease, he falls into error regarding treatment. If he means to say pneumonia, capillary bronchitis and odema of the lungs, which are so often complications of croup, succumb so easily to the treatment by muriate ammonia, or that they will not occur when cases are treated in this way, I think places him also in error. I have seen so many fatal cases of croup that I cannot believe that true membranous laryngitis can be successfully treated in the manner he describes. I have practised intubation over one hundred times, and have had fairly good success. But I have not relied upon remedial measures such as have been mentioned.

Dr. M. O'Hara: The easy cure of cases supposed to need tracheotomy can bear a very different explanation. It may well be in view of the many cases of recovery after the apparent judicial condemnation of the doctor, not depending sufficiently upon the powers of Nature.

Some years ago I reported a case and published it in the Proceedings of the County Medical Society, which can be referred to for details (vol. i. p. 21), entitled "Remarks on a Case in which the Necessity of Tracheotomy was Averted by the Systematic Action of Intense Cold Exciting Forcible Inspiration" This was a case in which a most eminent throat specialist considered the time gone by for success by tracheotomy, in a case of nasal diphtheria after measles, and considered it would be closed by death in eight hours, and yet recovered under use of ice, and he frankly told the mother afterward that he probably would have finished the case with the knife. Here there was an error of judgment; though all thought there was membranous deposit, there could not have been any. I have known similar cases, and, sending for a consultant surgeon in several cases, waiting brought the patient around. The late Dr. Henry A. Smith related at one of our meetings many cases of this kind in a discussion on the topic, and I hope those of us present familiar with the point will relate such cases for instruction. I rise to have this point specially ventilated.

Dr. H. R. Wharton: I agree with Dr. Turner that many cases of cronp get well with the simple medicinal treatment, but I disagree with him in regard to the large number of unsuccessful results from tracheotomy and intubation. My experience with tracheotomy is that even in the most urgent cases many recover. Last year, at the Children's Ho pital, 43 per cent. of the tracheotomies recovered. I have used chloride of ammonia to some extent in the treatment croup, but in the last few years I have put more confidence in the carbonate of ammonia, and follow the plan of treatment suggested by Mr. Parker, an English surgeon. I combine the carbonate of ammonia with syrup of senega. My routine treatment in ordinary cases of croup, in which the symptoms are not sufficiently urgent to call for intubation or tracheotomy, is to place the patient on carbonate of ammonia with senega, and to see that he is thoroughly stimulated. At the same time I believe that local treatment by inhalation of some medicated vapor is of service. I have recently employed the ordinary steam atomizer, in which I use an alkaline solution, such as carbonate of soda and glycerin. The atomized

solution is used as frequently as every half-hour or hour, according to the urgency of the symptoms. This solution is also useful after intubation or tracheotomy. I believe that many cases of croup do get well if carefully treated and do not come to the point where operation is necessary. I think that the use of strychnine and digitalis in the early stages of the disease often prevents trouble later on from cardiac failure. While at times these very urgent cases will get better without operation, yet in my experience this is the exception. Within a year and a half death has occurred in five cases of croup in which I was summoned to do intubation or tracheotomy, before I could reach the patient. I think it unwise to say that in these urgent cases operation should be postponed, for many cases of croup die suddenly.

Dr. B. Trautman: We should not lose sight of the distinction between catarrhal croup and membranous croup. Most cases of catarrhal croup will get well without much treatment. By keeping the patient warm and giving an emetic, the cure will be effected. In membranous croup the tendency is to postpone operation too long, till cyanosis sets in, and then the patient generally succumbs. The course of treatment which I pursue in membranous croup is the administration in one mixture of bichloride of mercury, tincture of iron and chlorate of potassium. As an emetic I give sulphate of copper, I grain for each year of the child's age. That will often bring away the whole membrane. If it does not bring it away, tracheotomy or intibation should be done at once.

Dr. Nutt, of Williamsport: This subject has interested me very much. For the last eight or ten years I have done intubation frequently—I think in 17 consecutive cases—and out of that number there has been only four deaths. I am therefore a strong believer in intubation, and I had hoped that there would have been a more general discussion on this point. I fully agree as to the necessity for intubating early. When I first began the use of this measure I usually put it off until the last moment, as a last resort. When the lungs are all filled up and the child cyanotic, I do not believe anything will save the child. I cannot see that intubation has any bad effect, and if used early in the disease we can reduce the rate of mortality very greatly.

Dr. John B. Roberts: It seems to me that this is the old story, that the man who never operates is sometimes wrong, and the man

who always operates is sometimes wrong. The discussion seems to be a little uncertain because some speakers use the word croup and others the word diphtheria. Whether or not they mean the same thing. I do not know. If I am called in surgical consultation to a child with difficult respiration due to some inflammatory disease of the throat, it makes little difference to me whether some pathologists call it croup and some diphtheria. I call them all diphtheria, and advise the attending physician to report the case as diphtheria to the Board of Health. Eight or ten years ago I made up my mind that in all cases of diphtheria where there was dangerous difficulty in respiration, my duty was to advise tracheotomy, and to do it That was before the time of intubation. I did tracheotomy over and over again, and, although I never saved a patient, the relief to the patient was so great that I never regretted the operation. I believed that in all such cases, where there was dangerous evanosis, my duty was to open the trachea. Since intubation has been revived by Dr. O'Dwyer, I have adopted that as the primary operation and reserve tracheotomy for a later procedure. To see a child suffocating to death and withhold your hand, is almost as bad as saying that you will not use the stomach-pump, even though you know that the person has poison in the stomach. Of course I do not advocate intubation or tracheotomy in cases where the child is dying from the diphtheritic poison and not from obstruction in the larynx. A few weeks ago I was called in consultation to see a child. The case had previously been seen in consultation by another gentleman, who said that nothing could be done. I was then called and introduced an intubation-tube, and in a few minutes the child was breathing comfortably. The tube was vomited out, however, but the relief which he had experienced was so great that the child permitted me to apply the tube again without struggling. He subsequently wore the tube about two days, and is now well. We must select our cases for tracheotomy and intubation, just as we select our cases for laparotomy or any other operation.

Dr. John C. DaCosta: It is not strange that such brilliant surgeons as the last speaker advocate tracheotomy. But what is the mortality? Some ten or more years ago I collected and analyzed 2,400 or 2,500 cases of tracheotomy, and the result showed that only about 24 per cent. recovered. But one reference has been made to-night to the old-fashioned method of using emetics.

Nothing will dislodge the membrane quicker in croup than an emetic. You may use ipecac or sulphate of copper, but one of the best is the lyellow sulphate of mercury, which latter, I think, has more than a simple mechanical effect. In true croup there is nothing equal to the internal administration of mercury, which may be given in the form of the mild chloride, or of the bichloride or the old-fashioned blue pill. Another point is the enforcement of sustaining treatment. If quinine is used in suppositories, it should be in the form of the bimuriate or bisulphate, or the sulphate mixed with tartacic acid, so as to insure its being dissolved. Anodynes may be needed to quiet spasm.

Dr. John B. Deaver: As has already been said, each case has to be treated on its own merits. There is much to be accomplished both by tracheotomy and by intubation in cases of true croup. My experience, however, has been that in many cases the introduction of an intubation-tube occludes the larvnx still further, and increases the child's suffering; in those cases I do tracheotomy. I think that these operations are better applicable to cases of croup proper, and I am not in favor of doing them where there is much depression, as occurs in true diphtheria. I cannot agree that all cases of croup die an easy death even when the tube is employed. I have seen them strangle as much after intubation or tracheotomy as before. The operation usually does give relief, but the inflammatory process may extend further down and the symptoms of obstruction may be renewed. I believe strongly in the use of mercury in these cases in order to get its constitutional effect. I use calomel and push it as far as I can, it being difficult to salivate children. The bichloride acts quicker, but it is more apt to irritate the gastro-intestinal tract. I believe that there is a difference between croup and diphtheria. I do not believe that they are one and the same disease. The one is local and the other is constitutional. This subject is a very interesting one, but I do not see how we are to instill into the minds of any the cases which should be intubated and those in which tracheotomy should be done. question must be judged by the experience of the operator.

Dr. W. S Stewart: The Doctor did not make a distinction between the true membranous croup and what is known as spasmodic. The latter can be relieved by emetics and counter-irritants, but in true membranous croup we need something more than emetics. I

agree in regard to the use of the remedies to which reference has been made. I believe in calomel, or mercury, in other forms. I I have been to many operations for tracheotomy, and have seen some cases when the operation was performed where I believe I should have still hoped for recovery without an operation. It is hardly fair to record such cases of recovery as a result of the tracheotomy. On one occasion I went three times to one case to assist in performing tracheotomy, and every time we were refused the privilege. Death was confidently prophesied by the attending physician, but the child recovered.

On another occasion I was attending a child where I feared death was going to result, and I advised the family to call in consultation a gentleman who intubated. During the interval of sending for the doctor and his arrival the child improved; still, I asked the doctor if it was a good case. He said he regarded it as a good case for intubation. I told him to put in the tube, and turned the case over to him. On the second day the child was dead. I do not say that we should never operate or never use a tube, but I do say that those who are enthusiastic in regard to operations are often careless in their zeal to press the proper treatment. They do not pursue the medical treatment as perseveringly as they should.

Muriate of ammonia by itself is very hard on the stomachs of children, but a good combination is chloride of ammonium with chlorate of potassium and syrup of senega. I often combine with this syrup of squills, ipecac and tolu; I also administer quinine by the mouth in the form of the tannate. This method often has a very good effect in arresting the development of ordinary membranous croup, when given in large and frequent doses, and the expectorant has the effect of absorbing the membrane already formed.

Dr. G. Betton Massey: There is a therapeutic item to which I have often wanted to direct the attention of general practitioners. During the ten years that I spent in general practice I invariably prescribed insufflation of powdered sulphite of sodium in those cases of diphtheritic sore-throat with general sytemic disturbance that seemed to be the first stage of diphtheria. In all these cases the membrane disappeared in from twelve to twenty-four hours, and it was a curious fact that in these ten years I did not see a bad case of diphtheria. Whether these membranous sore-throats were of that nature, and were arrested, I am of course uncertain. The

powder was insufflated through a paper roll every half-hour, the paper being burnt after each insufflation to prevent the wrong end being subsequently used and infecting the nurse.

Dr. Daniel Longaker: The theory which best fits the facts in these cases is that most of these cases are diphtheria, and that we have either a primary laryngeal diphtheria or a secondary laryngeal diphtheria. It often happens that a child is taken with membranous laryngitis and two or three days later the membrane will appear in the fauces. Diphtheria is primarily a local disease, with, later, general manifestations. It seems to me that the local disease in the fauces is the point of invasion, and a poison is developed and absorbed with such serious effects. I do not think that any one method of treatment of croup can be maintained. Every case must be treated on its own merits. I have found the peroxide of hydrogen very efficient when used as a swab or as an atomized solution. I have used it in a number of cases in the past three or four months with satisfactory results. I do not advocate exclusive medicinal treatment, or exclusive treatment by intubation, or exclusive treatment by tracheotomy. Each method has its own field of application.

Dr. Rosenthal: I have used the peroxide of hyerogen for over a year. Of the kinds obtained in the markets-manufactured by Chas. Marchand, Rosengarten & Sons, and Merck-I find that of Merck the best. At first I used it diluted, but gradually increased my strength of solution until now I use it absolutely pure. I apply it in membranous laryngitis in the form of a spray by means of an atomizer quite copiously, and where the membranes are visible the applications are made direct with probangs of cotton; my applications are made hourly. My remedial treatment is essentially antiseptic, mercury being used fearlessly. I also use stimulation freelyas, for instance, in a child of four years I gave as much as a gill of brandy during twenty-four hours. I firmly believe that my success in the treatment of diphtheria, whether it be of the larynx, or fauces, or nose, is based on this antiseptic treatment; and in peroxide of hydrogen I think we have a most potent means of applying it. I attribute my success to it, for I believe, while diphtheria is a constitutional disease, the presence of the membrane hastens the absorption of poisons and produces septicæmia and toxæmia; and in the peroxide of hydrogen we have a cleansing agent which quickly modifies, removes, or alters these conditions of things. In

the last epidemic I have treated all forms except of the larynx, with but one death, and that one was in a rhachitic child. There is one point that I wish to place myself on record as against, and that is the indiscriminate use of emetics in membranous laryngitis; I believe it is wrong in theory, wrong in practice, death is hastened by their use, and I have yet to see one case benefited or cured by their use. I believe that diphtheria and croup are clinically the same whether the disease progresses downward. The youngest case intubated by me was four months and twenty-seven days, the oldest five years and six months; in all my cases peroxide of hydrogen was freely used.

Dr. DaCosta: I understood that the discussion was on croup, and not on diphtheria. The mode of onset, the symptoms and the results of the two diseases are entirely different. Take a few points of the differential diagnosis:

In croup the attack is more sudden, and the patient recovers more rapidly. In diphtheria the patient does not recover fully for weeks, and the attack is apt to be followed by paralysis, which we do not find in croup.

Diphtheria is contagious; croup is not. Croup is found in isolated cases; diphtheria attacks whole families.

But if we are going to talk about diphtheria, I would indorse peroxide of hydrogen. I know nothing that will clear off the membrane quicker than it will.

Dr. DeForest Willard: While there are such wide differences of opinion in regard to the pathology of these diseases, it is not strange that there should be these marked differences as to methods of treatment. Some of the speakers, perhaps, refer to one disease, while others refer to another. We all recognize that mild cases get well without much treatment, but there is another grade of cases which will die, whether treated medicinally, or by intubation, or by tracheotomy. Reliable inferences cannot be drawn from a small number of cases, and even in larger numbers we all know that we may have a hundred successive cases of recovery in a certain disease, while all of the next ten may die. This is especially true in membranous croup and diphtheria. I am confident that I have saved a good many lives by tracheotomy, but I have also lost many. Yet the comfort secured to the patient has amply repaid me, even though death has subsequently taken place.

Dr. Turner: I was led to write this paper from the fact that I knew that certain cases of spasmodic laryngitis were intubated and reported as cases of recovery from croup. The treatment which I have mentioned will decide the question whether the case is one of spasmodic croup or not. I also employ calomel, and use quinine in the form of the bisulphate in suppositories. It takes the membrane three or four days to be separated. It cannot always be removed by an emetic, but if you get rid of the spasm you give a great deal of relief. Asafetida has not been used before in croup. I do not say that intubation and tracheotomy are of no use, but where the membrane is below the trachea and in the bronchial tubes, the case cannot be relieved by these measures. The treatment which I advocate gives to the child sleep, rest and nourishment. Take a healthy child and treat it with emetics and the other things which have been mentioned, rousing it up every hour to spray its throat, and it would take a good constitution to stand that. Croup is not a very common disease. And in my paper I have referred not to diphtheritic croup, but to membranous croup.

In regard to the employment of calomel, I will state that I employ a purgative dose in the beginning of treatment, if constipation exists, to arouse secretions, and do not use it for its supposed action to dissolve the membrane.

NATURE wages incessant war upon the investigator; he can hope to win only by unremitting endeavor to circumvent her — Nation.

NEVER use sulphur externally, on the surface of the skin, where the glands are open, as it will collect in the glands and give the appearance of gun-powder on the skin.—Shoemaker.—Progress.

THE INTERNATIONAL PERIODICAL CONGRESS OF GYNECOLOGY AND OBSTETRICS—This new organization will hold its initial meeting in Belgium September 14-19, 1892. Its patrons include the names of many men eminent in the special departments of the proposed Congress. Dr. F. Henrotin, 353, La Salle Ave., Chicago, is the American Secretary.

SELECTED PAPERS.

ADDRESS ON THE METHOD OF ZADIG IN MEDICINE,

By T. Lauder Brunton, M.D., D.Sc.Edin., F.R.S., LL.D.(Hon.)

ABERD., F.R.C.P

We are obliged in medicine to judge of the unseen from the seen, and from the objective data which are presented to our senses. we must draw conclusions regarding the processes which are going on, or have already gone on, in the persons of our patients. We must, in fact, track symptoms which we see back to their causes. Now, this process of "tracking" appears to me to be a fundamental one in man, and one which seems really to be a remnant of the qualities possessed by our prehistoric ancestors. According to Haeckel, man runs through in his embryonic condition the history of the development of the race from a simple unicellular organism up to the human being. But even after birth, traces of simian ancestry still appear. We have all noticed that when an infant is warming its feet before a fire, the soles are not held straight forwards like those of an adult, but are turned in towards one another, and the great toes are drawn apart from the others in very much the same position as the feet of a monkey. Lately, too, Dr. Louis Robinson has shown that the arms of infants have an extraordinary power of supporting the weight of the infant's body, and in this characteristic also it resembles the monkey. Even in adult life, the position of the feet, which we notice so easily in infants, is retained by many, and we frequently find that the soles of people's boots are worn more on the outer than on the inner edge, the feet still tending to turn inwards, though only to a slight extent. The same tendency to reversion which we notice in the feet may be observed I think also in the faculties of the mind, and the keen interest in tracking game by which prehistoric man was enabled to exist still evidences itself in the intense eagerness with which boys will read in Cooper's novels about Indians following a trail, or adults will pore over narrations of Gaboriau's stories of the police on the track of a criminal. There can be little doubt, I think, that the profession of medicine is a most intensely interesting one, and I am

inclined to think that its special charm is, to some extent at least, due to the fact that it is constantly demanding the exercise of those qualities of tracking which we find in Cooper's Indian heroes. I know of no better example of the exercise of this faculty than that narrated by Voltaire in his his story of Zadig. I thought it was an original idea of my own to point out the application of this method to medicine, but I find that I am only a humble follower of Professor Huxley, who has already written upon the applications of the method of Zadig to biology and paleontology.

"Zadig was a young man who, disgusted with life, retired from Babylon to a lonely place on the banks of the Euphrates, and there studied animals and plants until he saw a thousand differences where others could see only uniformity. One day one of the queen's eunuchs, followed by a band of officials, came hastening past, and asked Zadig, 'Have you seen the queen's dog?' Zadig modestly answered, 'A bitch, I think, not a dog.' 'Quite right,' said the 'eunuch, and Zadig continued, 'A very small spaniel, has lately had puppies, limps with the left fore foot, and has very long ears.' 'You have seen her, then?' said the eunuch. 'No,' said Zadig; 'I have never seen her, and did not even know that the queen had a dog at all.' At the same time the finest horse in the king's stables ran away, and the chief huntsman, in seeking it, also made inquiries of Zadig, who said, 'A first-rate galloper, five feet high, smallhoofed, tail three feet and a half long; cheek-pieces of the bit are of twenty-three carat gold and the shoes silver.' 'Where is he?' cried the chief huntsman. 'I have not seen him and never heard of him before,' said Zadig. Naturally enough he was suspected of having stolen both the spaniel and the horse, was tried and condemned; but no sooner was sentence pronounced than both the missing animals were found. Zadig was then asked to explain how he knew so much about them without having seen them, and this he said was the way: He noticed one day in the sand the tracks of an animal which he easily recognized as those of a small dog. Long faint streaks on the ridges of sand between the foot-prints indicated that it was a bitch with pendent dugs, showing that she had had puppies shortly before. Other marks on the surface of the sand close to the prints of the fore feet indicated that she had very long ears, and one of the foot-prints being fainter than the others, showed that she was slightly lame. As for the horse, the marks of

his hoofs were all equidistant, showing that he was a famous galloper. In a narrow alley the dust on the trunks of the trees was disturbed at three feet and a half from the middle of the path; this showed the length of his tail, which had swept the trees as he lashed it from side to side. Branches of the trees met overhead at a height of five feet, and under them were some newly-fallen leaves, showing that the horse had brushed against them and was therefore five feet high. As to his bit, he had rubbed it against a stone which Zadig recognized as a touchstone, and his shoes had left such marks upon pebbles of another kind as showed that they were made of fine silver.

"A story very like that of Zadig is told of an old Fakir in the Syrian Desert. He was one day visited by several Arabs, who asked him whether he had seen their lost camel. "It was very tall,' said the Fakir, 'it was blind of the right eye, it had lost one of its front teeth, and it was laden on the one side with honey and on the other with corn.' 'Yes,' said the Arabs, 'that is exactly the camel; you have mentioned every point about it. Where is it?' 'I have never seen your camel,' said the Fakir. 'But, if you have not seen it, said the Arabs, 'how can you know all about it?' 'I knew it was a very tall camel, because the tracks of its steps in the sand were further apart than those of an ordinary-sized camel. I knew it was blind of the right eye, because it had cropped the herbage only on its left side; and I knew that it had lost one of its front teeth, because in the middle of every bite that it had taken there was a small uncut part corresponding to where the tooth ought to have been. I knew that it had been loaded with honey on the one side and with corn on the other, because I saw flies buzzing round one side of the track and ants busy on the other carrying away grains of corn that had fallen from the load."

An admirable example of the application to medicine of this method of tracking used to be told with great gusto by my late triend, Dr. Milner Fothergill, and I regret greatly that I cannot tell it with the same power and vividness that he did.

"In the town of Leeds there once lived a quack who had received no professional instruction whatever, but was known far and wide for his wonderful cures, and especially for his power of diagnosing the diseases of patients whom he had never seen by simply examining their urine. A celebrated surgeon, Mr. X., wishing to see his method of working, desired to be present one day, and the quack readily acceded to his request, feeling much flattered that so great a man should patronize him. Shortly after Mr. X. had taken his seat a woman came in with a bottle of urine, which she handed to the quack. He looked at her, then at the bottle, held it up between him and the light, shook it, and said: 'Your husband's?' 'Yes, sir.' 'He is a good deal older than you?' 'Yes, sir.' 'He is a tailor?' 'Yes, sir.' 'He lives at S.?' 'Yes, sir.' 'His bowels are obstinate?' 'Yes, sir.' 'Here,' he said, handing her a box of pills, 'tell him to take one of these pills every night for a week, and a big drink of cold water every morning, and he will soon be all right.' No sooner had the woman gone out than Mr. X. turned to the quack carious to know how he had made out all this. 'Well you see,' said the quack, 'she was a young woman, and looked well and strong, and I guessed the water was not hers. I saw she had a wedding ring on her finger, so I knew she was married, and I thought the chances were it was her husband's water. If he had been about the same age as she it was hardly likely that he was going to be ill either, so I guessed he was older. I knew he was a tailor, because the bottle was stopped, not with a cork, but with a bit of paper rolled up and tied round with a thread in a way that no one but a tailor could have done it. Tailors get no exercise, and consequently they are all very apt to be constipated. I was quite sure that he would be no exception to the rule, and so I gave him opening pills.' 'But how did you know she came from S.?' 'Oh, Mr. X., have you lived so long in Leeds and don't know the color of S. clay? It was the first thing I saw on her boots the moment she came in.'

Now, of late years we have got so many new methods of investigation that we are sometimes apt to forget the old habits of close observation by which this quack made out so much, and proved himself, although without any diploma, a worthy descendant of the Water Doctor, whose picture, painted by Gerard Dow, occupies such a distinguished place in the Gallery of the Louvre. Without resorting to the plan of tasting the urine, by which that Water Doctor and the brethren of his craft no doubt recognized the presence of sugar, he could learn a great deal from its simple appearance.

Some years ago, when staying in the country with a medical

friend, whose wife was boiling some eggs in the dining-room for breakfast, I said to her from the other side of the room: "You have cracked one of those eggs." She said, "I don't think I have." On taking them out of the pan, however, she found that one of them was cracked. She wondered how I knew, but the explanation was simple enough. The pan had boiled over, and the water would not have held the steam long enough to boil over unless there had been something in it to make the bubbles tenacious, and this could hardly be anything else but albumen which had escaped from a crack. In the same way, although the Water Doctor did not know about albumen, he probably recognized that the persistence of froth on the urine after shaking it was of somewhat ominous import, and that would lead him to give a guarded prognosis, just as one now adays sometimes pities an old gentleman who unconsciously proclaims his precarious tenure of life by the froth he leaves behind him in a public urinal.

The Water Doctor may even have learned to associate this frothiness with nervous symptoms such as restlessness, irritability of temper, and sudden outbursts of passion quite out of proportion to the amount of offence. I well remember an incident some fifteen years ago where an apparently causeless outburst of fury on the part of an ordinarily quiet man completely astonished all his friends, who only understood it when his subsequent illness and death showed that his sudden passion was but an indication of unsuspected disease. The steward of St. Bartholomew's Hospital, Mr. Mark Morris, a man of very keen observation, has told me that whenever a patient comes down to the office at 11 o'clock at night, and wants to be discharged there an then, they know that he is suffering from cardiac disease. Perhaps the outburst of fury in the Emperor Theodosius, which resulted in the massacre of Thessalonica, was only an indication of the disease which later on resulted in dropsy and death.

The Water Doctor would be sure to divide his frothy urines into pale and dark, and he would know that these two corresponded to quite different types. The dark urine was probably passed by an individual who was short of breath, disposed to rest, and frequently drowsy. The pale urine would be passed either by an individual who rose in the morning with his eyelids swollen and puffy, and who was probably drooping and languid during the day, or by a

person of quite a different stamp—energetic, irritable, restless, sleepless, always on the move, and driving on like a high-pressure engine. Further than that, perhaps, the Water Doctor might not go; but we know now that the dark, frothy urine has probably been by a man suffering from cardiac disease, while the pale urine is due to renal mischief; and the classical researches of Bright and others have shown us that the man with big eyelids has probably tubular nephritis, while one who drives himself and his neighbors without intermission suffers from contracting kidney. Nay more, physiological and pathological researches have taught us that the dark urine of cardiac disease is due to low tension in the arterial system in general and in the renal arteries in particular; so that the excretion of water is diminished, while the pale urine is due either to high tension in the arterial system, as in cases of gouty kidney, or to diminished power of excreting solids in chronic nephritis.

But there are other indications of disease which may sometimes be recognized without examining the water, and I was greatly astonished by a man diagnozing albuminuria from the photograph of a patient although there was no swelling whatever visible in the face. On inquiry afterwards I learned that the diagnosis was made from the glistening of the eye. A tendency to edema had caused reflection of light along the sclerotic, and this caused the eve to appear more brilliant than usual. A similar glistening of the eye we get as an effect of the emotion of compassion, in which the increased secretion of tears moistens the eyeball more than usual. An entirely different effect is produced by the emotion of anger, where the eye does not glisten but glitters, or by great grief, which renders the eyeball dull and lustreless. If we try to follow these appearances back to their physiological cause, we may find our attempt helped by considering a typical lack-lustre eye, such as that of a dead codfish. We see at once that the eyeball here is flaccid and its surface perhaps indented, instead of being tense, as it ought to be, and its surface smooth. We may imitate this condition very readily upon a child's India-rubber balloon. If we let the air out it at once becomes limp. If we blow it out it begins to shine, and the tighter we blow it the more does it reflect the light. The tension in the eyeball under ordinary conditions has a relation to the tension of the blood, and the bright eye indicates the stout heart which may win the fair lady; while the lack lustre eye is associated

with a feeble circulation, which frequently has its origin in the depressing emotions of sorrow or fear. The glittering which occurs in anger is, I think, part of the same physiological process by which the face in great anger becomes pale, and the blood concentrated in the internal organs, ready to supply force to the muscles in a sudden attack upon the enemy. It has always seemed to me that Orchardson's wonderful picture of Voltaire complaining of the insult that had been offered to him would have been rendered still finer by a very minute touch of white upon the eveball to indicate the glitter of anger. The bright eye of consumption is familiar to us all: the high temperature, so common in the disease, tending to make the circulation more than usually rapid, the intellect often more keen, and the hopes more bright than in health, though the face may be emaciated and the body reduced almost to a skeleton. But if we find in a thin person a languid instead of a bright eve, we are led to look for the cause of the patient's leanness rather in want of food than in rapid combustion, and not infrequently, if inquiry teaches us that the patient is able to obtain food, we may diagnose either that he cannot eat or cannot digest .- Brit. Med. Jour.

PERKINISM.—Dr. Billings, Surgeon U. S. Army, has given a series of very interesting lectures upon the "History of Medicine." He gave an entertaining account one evening of "Perkinism," one of the fads of a century ago, which made great commotion in medical circles. Elisha Perkins, the originator, presented to the profession and the world at large the great benefit that could be derived from a pair of tractors, or "pullers-out of disease." These consisted of two pieces of metal, one brass, another steel, four or five inches long. They were held together like a pair of compasses, and the two points drawn lightly over the affected part. It was about the time of the experiments of Galvani, and it was claimed that their effect was produced by electricity. The cost of the tractors was 12 cts., and were sold by Perkins for \$25. Such credit did the subject receive that a number of hospitals were founded for the treatment of cases by this wonderful method. A Perkinian institute in England published a report of 5,000 cases, and the Archbishop of Casterbury was implored to compose a new prayer that no evil powers might be allowed to impede the workings of the magic tractors. Perkinism goes on the shelf in the history of medicine with the King's Evil, Bishop Berkeley's Tar water, the magic of the Egyptians, the charms of the Indian enchanters, and the numerous humbugs of the present day. - Cin. Lancet-Clinic.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., GEO. GILLETT THOMAS, M. D., " Editors.

The Country, and especially from the medical profession of The Carolinas. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the Journal, by sending the address to this Office. Frompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and accept ability. All remittances must be made payable to Thomas F. Wood, M.D., P. O. Drawer 791, Wilmington, N. C.

THE PERPLEXITIES OF HONEST MEN IN THE PROFESSIONS OF PHARMACY AND MEDICINE IN REGARD TO "BLIND PREPARATIONS."

We cannot refrain from alluding to an old topic again, because of its increasing interest.

The attitude of the medical profession to the chemist and pharmacist of to-day is an anomalous one, which has been increasing in perplexity year by year, until the day when there will have to be a protocol between the two professions with a view to the settlement of the difficulties is not far distant.

Every new article, pharmaceutical or chemical, is now patented

and copyrighted, or protected by some bewildering or misleading name, by a class of chemists and pharmacists who a few years ago would have disdained such a course as much as Jenner would to have made vaccination a secret process.

Here are only a few examples of the kind: Two chemists, one the chief, the other his assistant, discover in the laboratory a sweet principle entirely different from the sugars or glycerine, named it saccharine. It was raised from the position of a chemical curiosity to that of a medicinal agent, principally as a substitute for sugar for diabetics. The assistant goes to Germany, secures a patent on saccharine, ignoring the interests of his chief, and pursues the manufacture of it as a commercial enterprise. Everyone using saccharine, then, is using a proprietary chemical, and paying a royalty.

Take the case, also, of chloroform, to which we called the attention of our readers before. We believe that the great bulk of chloroform consumed in this country at present is wholly, or in part, produced by a patented method, and no one could compete, either in purity or in price, who holds on to the old processes.

That independent fortunes have been made by advertising diligently and expertly, keeps a vast army of eager seekers after gold alert to the chances that may lead them up into the happy road to good luck. The boldness of some of these men is very great. They set about at once to dupe the medical profession, knowing that in proportion to the credulity of the doctors will depend the sales of the vaunted new discovery. Many of them are able to come with arguments and demonstrations that are all-but incontrovertible, for some of these eager hunters for gold are men of learning or experience, broken down by former unfortunate ventures, or unwilling to wait the slow process, which, when patiently pursued, lead only to a moderate competency. They know another very important thing, that there is a code of ethics acknowledged by educated physicians, and some kind of artful reasoning must be used to silence the consciences of those who are faithful to their obligations - this class being far the majority—and to this he applies his talents too often with success. Many are the trials of faith the medical editor has to suffer at the hands of some of these sharpers, when he is called to discriminate between the manufacturer who is

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honestly working to supply the needs of the physician, or dishonestly trying to palm off a worthless article.

One would think that the conferences of the Committee of Revision of the Pharmacopæia of the United States would be a good point from which to originate a plan that would settle all the difficulties, but so far the Committee has been able to see no other way than to accept "the Code" and abide by it. In the meantime good and loyal physicians are trying remedies about which they can only learn that it belongs to a certain "chemical series," an intimation practically as mystical as naming it an active principle of some plant of which he never before heard. The profession has already had a practical illustration of this in that therapeutical farce, the rise and fall of "gleditschine," and it will be at the expensive burial of many other abortions, until the true men of both professions clarify the atmosphere,

It is largely a deficiency of education in certain elements of materia medica, pharmacy and chemistry that makes the profession such an easy prey to pharmaceutical charlatans, and it is almost entirely due to the strictly honest work of a few manufacturing chemists and pharmacists that the medical profession has such a list of choice medicaments to earich our armamentarium.

Our present standards need revision; doctors cannot be their own druggists without neglecting duties that appertain more essentially to their profession, but this would be a far better solution of the difficulty than to submit to being taught therapeutics and materia medica by every dealer who has the money to advertise and keep a smart drummer on the road.

EXPERT TESTIMONY.

Professional partisanship would be a better term to designate many of the cases of so-called expert testimony which come to public attention occasionally. We believe the time is fast approaching when there will be reformation in the practices of the courts as regards experts, and nothing is hastening it faster than the surprising and inconsistent attitude of so-called experts themselves. What kind of a witness would one expect to get if he had to pay

him in advance? Would he not be expected to testify in accordance with the wishes of the person who furnished the money? And if it came out in the examination that this witness had been paid in advance, would not his testimony be rejected? In the interest of good morals, then, would it not be equally proper for the court to invalidate the testimony of an expert who in advance had stated his price? For who is it that settles the fact of expertism? Is it the court, or the lawver, or the expert himself? Who is authorized to say that any one is an expert? In fact, is not this the faultiest part of all the practice of cours that there is no standard fixed upon by which a man can be adjudged an expert? A physician may be an excellent practitioner, and to all intents and purposes serving a community with skill in his rounds as a family physician, could pass the Board of Medical Examiners, and yet would not be an expert in a poisoning case, in the strict sense of the word. He would tell you that he had been instructed in all the matters of toxicology, might say he had had an experience and in that time had not treated a case of arsenic poisoning. He might not be able to answer the questions of a lawyer who had been sitting up all night cramming a Medical Jurisprudence, but knew more than judge, jury and bar combined about the subject, and not be an expert.

All this makes it easy for contending lawyers to array two sets of physicians, they wishing, many times, for no better result than to confuse the jury by showing that even experts do not know about the difficult questions they have propounded, and the doctors themselves are belittled and actually lose influence in matters about which they are entitled to respect and confidence. The moral we wish to enforce is—let us beware how we allow lawyers to beguile us into the attitude of experts, and let us as physicians wait until the law is so framed as to remove the stigma of "paid witness" from those who are entitled to serve as experts before we go with alacrity into courts.

While not exactly in the same train of thought, we think it appropriate to give in this connection an extract from *The Nation* that we may have a view of expert testimony from a non-medical standpoint:

"We hope that those physicians who are sticklers for the fine points of medical ethics have not failed to notice the harm done their profession by some of the expert medical testimony in the attempt to determine the sanity of E. M. Field. The extraordinary fact was brought out that one expert of high standing had at first given it as his written opinion that the man was insane-for which opinion, based though it was mostly upon the representations of others, he had been paid \$250, and then had come into court to testify that he thought Field sane. Now, there was no particular discredit in his having changed his mind, except as it showed him to have been hasty and careless in reaching his first decision, but does not every one see how his taking an exorbitant fee for a medical service, simply because it was to have a legal effect, and then being compelled to admit that the service was really worth nothing whatever, brings the profession into disrepute? Such things would not be of so frequent occurrence did the medical associations make a rule, as they should, that only an ordinary charge should be made for expert testimony in legal trials. If a physician were to get for his time in court no more than he would get for the same time passed in his office or making his rounds, the ground for the increasing popular cynicism in regard to the honesty of medical experts would be cut away. Medical ethics is mostly confined to such questions as that of a doctor's advertising himself, or that of his committing the great crime of helping save life in company with a physician of another 'school'; we think its sphere might profitably be extended so as to cover some of the evils of the system of expert testimony."

Modern Medicaments.—Before us is the latest list, just issued, of the extensive line of standard and pharmaceutical preparations, and modern medicaments manufactured by Parke, Davis & Co. A novel and attractive feature of their comprehensive and well arranged list is the representation, by 40 engravings, of the home laboratories at Detroit and the branches at New York, Kansas City and Walkerville, Ontario. These engravings comprise views of the exterior and interior of the laboratories and offices and sections of departments at Detroit. The cover is engraved, and altogether it is the most complete list ever published of the products of this well known house, and will be welcomed by their friends. To physicians interested a copy of this list will be mailed on request.

REVIEWS AND BOOK NOTICES.

A Manual of Operative Surgery. By Frederick Treves, F.R.C.S. Vol. I. Philadelphia: Lea Brothers & Co., 1892.

A work on operative surgery is no new thing in medical literature, but one with the great merits of this is worth a thorough examination. It consists of two large volumes of over 700 pages each, beautifully printed and illustrated sufficiently with clear cuts, many of which are original.

Full of wisdom is the first chapter on general principles which treats of the constitution of the patient as it affects the result in an operation. Beginning with a quotation from Sir James Paget as a text: "Never decide upon an operation, even of a trivial kind, without first examining the patient as to risks of his life. You should examine him with at least as much care as you would for life insurance. It is surely at least as important that a man should not die, or suffer serious damage, after an operation, as that his life should be safely insured for a few hundred pounds." With this as a text we get an admirable set of rules for the avoidance of avoidable risks.

As to the operator himself, we quote from the author: "The surest sense of confidence rests with the operator, who knows accurately what he intends to do and how to do it. The least success follows the hand of the man who retains throughout an operation a speculative spirit, who depends largely upon his imagination for conditions, and upon fortune of events for results. A shakiness of the hand may be some bar to the success of an operation, but he of a shaky mind is hopeless. In the handling of a sharp instrument in connection with the human body a confusion of the intellect is worse than chorea." And so throughout the whole of the instructions as to the general principles, the operating room, the instruments and general accessories the details are explicit.

The administration and selection of anesthetics in part 2 will attract the early attention of the reader, for there are many who have to do surgery that are not quite certain about anesthetics. This section was specially written by Frederick William Hewitt A.M., M.D., anesthetist at the London Hospital. We will extract

a few thoughts here and there: "With ether it is possible, almost with impunity, to pass beyond the realm of reflex action, and to keep up an unnecessarily deep narcosis: but with chloroform this is not the case, an overdose being likely, with but little warning, to set up the most alarming symptoms."

Of mixed anesthetics he says of nitrous oxide and ether: "This is the most valuable combination of anesthetics with which we are acquainted. It is valuable because the anesthesia of nitrous oxide may be prolonged by adding ether vapor when the patient has become unconscious from the gas; and also because, by giving nitrous oxide before ether, the former agent prevents all unpleasant initial effects which would be produced by the latter." This is not a mixture employed, to our knowledge, in this country, and these favorable expressions ought to lead to a trial of it.

He warns against any but the most cautious use of chloroform after the administration of morphine. May be the old custom of employing these two drugs needs a revision by some of our surgeons.

As regards the dangers under anesthesia, especially as to chloroform: "The administrator should accustom himself to observe the pulse as frequently as is practicable, and this is more especially necessary with chloroform. * * * Those who recommend that no attention should be directed to the pulse, but that the respiration only should be watched, are not so likely to obtain early indications of approaching danger as those who keep a sharp look-out for changes in the character of the pulse."

In the short preliminary history of the ligature of arteries a fact is brought out that constantly surprises us, that Celsus, who flourished in the first century, advised the ligation of arteries on each side of the wound, and then divided between the ligatures. It was in 1564 that Paré applied the ligature for the arrest of hamorrhage; but a century after the English surgeon, Wiseman, recommended the use of a "royal" styptic, or the cautery, in the place of the ligature; and in 1761, in England, the ligature required specially advocacy, from Sharp, because "it was not as yet universally practiced among surgeons residing in the more distant counties." The general directions for the ligation of arteries and the ligation of special arteries is set forth with due precision, with sufficient illustrations, and with many practical hints.

Nerve-stretching and operations upon the nerves in general complete Part 4 of the volume, and in Part 5 are considered Amputations, a most important division of the subject, and one that will be consulted very frequently by readers. After a most interesting history of amputation, there follow chapters on the amputation stump, describing a good stump and a bad stump, and all the details of instruction to help the surgeon to the best results. One practical point he matter out which we note passing, among a multitude of other good things about the Esmarch bandage substitute for a tourniquet. It is a great convenience to the nervous operator, but its advantages to the patient are not so clear. The objections are that, if pressure be maintained for more than a quite short time, some temporary paralysis of the vaso-motor nerves of the part follows, with the result that, when the tourniquet is removed, an unusual amount of oozing occurs from the still dilated vessels. Oozing usually involves much sponging, rubbing and washing of the raw surface, the possible application of some styptic solution, and the expenditure of not a little time. Besides this, there arises a necessity for double or triple the number of ligatures commonly employed.

It must not be understood that this work consists of minor surgery, except the special surgery of the eye and ear.

Operations upon the abdomen, under which are treated all of the modern operations of abdominal section, ovariotomy, oophorectomy, hysterectomy, suture of the intestine, resection of the intestine, intestinal anatamosis, enterotomy, colotomy, intestinal obstruction, operations on the stomach, gastro-enterotomy, operations for hydatids of the liver, operations for hepatic abscess, nephrectomy, herniotomy, supra-public cystotomy, etc., etc.

The author is not disposed to believe that the future history of abdominal surgery will be associated with the names of McDowell, Nathan Smith, Atlee, Charles Clay, but with Sir Spencer Wells and Sir Joseph Lister, ignoring, too, the brilliant part his own countryman, Lawson Tait, has taken in making it a practical operation. Future historians will surely not be so derelict.

General practitioners who have also to be surgeons will consult this work with great satisfaction. Every necessary detail, a large choice of operations, practical directions, the outflow of the abundant resources of an experienced operator, which we learn on every page, all tend to make the work of the greatest value to practical men. As this work is in time tested by those who are preparing for an operation, we believe it will grow in favor and prove almost indispensable.

PRACTICAL TREATISE ON ELECTRICITY IN GYNÆCOLOGY. BY EGBERT H. GRANDIN, M.D., Chairman Section on Obstetrics and Gynæcology, New York Academy of Medicine; and Joseph H. Gunning, M.D. Illustrated. Octavo, 180 pages. Muslin, \$2.00. New York: William Wood & Company.

The title gives a very good idea of what the reader of this book will find between the covers. The six chapters are devoted to General Considerations and Description of Apparatus; Routine Use of Electricity; Electrolysis; Static, Franklinic, or Frictional Electricity; The Treatment of Malignant Growths by the Galvano Cautery; Electricity in Obstetrics.

It is the aim of the authors to present, as far as possible, "an unbiassed estimate of electricity" in the treatment of diseases of women; and in the second chapter, in speaking of its application in displacements of the uterus, they say "these prefatory remarks have seemed essential because, in their enthusiasm, certain gentlemen have claimed for electricity virtues which it does not possess. Electricity is no cure all. It is useful within certain limits, and no further."

It is such conservative statements as will be found in this work, together with the many valuable hints on apparatus and application, that will enable the general profession to avoid disappointment in their trials of this valuable therapeutic agent, for valuable it must be if used in properly selected cases and in proper manner.

R. D. J.

THE PHYSICIANS HAND-BOOK FOR 1892. By ALBERT D. ELMER, G. P. Putnam's Sons, New York, 1892.

This is a stout morocco bound book, with flaps 4x6½ inches, 327 pages, red edges, handsomely prepared as a visiting list and daily record of patients. It has ample tables of doses of new remedies, weights and measures, calendars, directions for examination of urine, directions for the correct writing of prescriptions, and many very useful things to freshen the memory of the busy doctor and

serve as an immediate pocket reference book. The usefulness of such a book is undoubted, and this seems to be one of the best, its size being its chief objection.

PTOMAÏNES, LEUCOMAÎNES AND BACTERIAL PROTEIDS: or the Chemical Factors in the Causation of Disease. By Victor C. Vaughn, Ph.D., M.D., and Frederick G. Novy, Sc D., M D. Philadelphia, Pa., 1891.

A comparison of this edition with the one of 1888 shows how thorough the revision has been, and no wonder, for no subject in the science has expanded with such rapidity, except bacteriology, and this has kept apace with it, and rivaling at every step that study. It is well that there are institutions of learning like the Michigan University, where such men as Vaughan, with all the vigor of prime manhood, with clear heads and good training, may pursue studies for the advancement of science.

This edition has been augmented by 75 pages, and is really the authority on the subjects it treats.

BOTANY: A Concise Manual for Students of Medicine and Science, By Alexander Johnson, F.G.S.; with 164 illustrations and a series of floral diagrams. New York: D. Appleton & Co., 1891.

This is not an elementary botany for beginners, but is intended to aid the advanced student of the science in making the best use of lectures. It follows closely the curriculum of the Edinburgh University, but is well adapted to any course. The printing and illustrations are beautifully done. Botany is not now taught in any of the American medical colleges, or if it is, it is only an optional course, and American students ignore it entirely. The amount of good training and helps to the thorough understanding of vegetable physiology he loses by thus ignoring botany he will only estimate when in later years he detects his deficiency.

Manual of Physical Diagnosis for the Use of Students and Physicians. By James Tyson, M.D. J. B. Lippincott & Co. [Price \$1.25.]

This is a concise manual of physical diagnosis, prepared primarily to aid the classes of the author in the study of this essential branch. It has the merit of being clear, and shorn of all extrane-

ous matter, no small merit in the eye of the medical student, and a difficult piece of work for any author to accomplish.

The Physician as a Business Man: or How to Obtain the Best Financial Results in the Practice of Medicine By J. J. Taylor, M.D. Philadelphia: The Medical World, 1891.

This little book has a good deal of excellent advice, which, if followed, would help to make a doctor a careful business man. Young men are not inclined to read such books, and the older men are too set in their ways to be influenced by them.

Annual of the Universal Medical Sciences: A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sajous, M.D., and Seventy Associate Editors, Collaborators and Correspondents. Illustrated with Chromo-Lithographs, Engravings and Maps, Five Volumes, 1891. F. A. Davis, Publisher, Philadelphia, 1891.

Full subscription lists have greeted the solicitors for these wherever they have gone with this work, which is a better measure of its merit than any anything that might be said for or against these sumptuous volumes.

What an army of editors and sub-editors, thrashing and winnowing as best they may all the crops of all the world, finding much to winnow, but in the aggregate a large mass to put down as truth until more truth can be had, and much of this golden-looking grain so carefully garnered will prove to be "cheat." But for all this the seed-time and the harvest go regularly along, and the gain is perceptible, if it is not in exact ratio to the volumes printed. But what for the editors who cull the vast harvest! Why, if there is no other result, this immense labor in pondering upon the harvest, and extracting the best of it, is educating these laborers for the future, so that the literary spirit of the day is kept active and the future supply of writers is assured.

We believe that these volumes will still further have to be reduced and the material more concentrated. It is impossible to avoid some repetition from one year to another, as the work of one year depends so much upon what was done the year before, but more experience will at last enable the editor and his assistants to crystalize their material still more clearly.

PLAN ADOPTED BY THE BOARD OF MEDICAL EXAMINERS OF NORTH CAROLINA IN CONDUCTING CLINICAL EXAMINATIONS.

In accordance with the resolution adopted by the Board of Medical Examiners of the State of North Carolina, at its session in Asheville, May 27th, 1891, to wit: "That this Board hereby agrees in the examinations of 1893 that it will introduce a clinical feature in the examinations on Practice of Medicine and Surgery. Such examinations shall be conducted on a plan to be made and submitted at a subsequent meeting, and a committee of two shall be appointed to formulate and submit such plans as will put this new feature into operation," it is hereby ordered that the following shall be the rules and regulations for the clinical examinations above specified, to be in force until amended:

1. Each applicant for license shall file with the Secretary at the time of his registration a certificate from the medical school from which he is graduated, or may have attended, that he has had clinical teaching, personally examining and prescribing for patients, and has been instructed in the use of splints and bandages and such other surgical appliances as are most frequently used, and has had opportunity to examine and diagnose dislocations and fractures.

2. If the applicant has not graduated, or has no certificate, then he shall exhibit to the Secretary, from two or more reputable registered physicians, a certificate that he has been in active practice one or more years, and has had charge of, or practiced in the management of, at least two cases of labor; and such certificate shall be attested by the Clerk of the Superior Court of the county in which such physician lives, or by a Notary Public.

3. On the second day of each session of the Board the Secretary shall, by lot, assign eight or more of the class, as the Board shall direct, to the clinical work, and the Board shall designate which of the Examiners shall conduct the examinations.

4. These examinations shall stand in lieu of the written examinations on the Practice of Medicine and Surgery; and the standard shall be the same as for the written work.

5. If any applicant shall not be well instructed in clinical work, and shall fail to give evidence of his proficiency in such instruction to the Board, he shall not receive a heense.

6. It shall be the duty of the Secretary to correspond with the members of the State Medical Society in the towns chosen for the meetings, and by their assistance have ready for each year a sufficient supply of clinical material for the work indicated by these regulations.

THE ACTION OF CACTUS GRANDIFLORUS .- A recent physiological and therapeutic study of this new predicament has been published by Edouard Boinet and Jules Boy-Teissier (Bulletin Géneral de Therapentique, October, 1891). They find that cactina, the alkaloid of the plant, is but little poisonous. It increases the energy of the cardiac systole, exhibiting all the characters of a heart touic. In doses of two milligrammes, the drug did not diminish the number of cardiac beats in the case of the frog, nor did it produce any alterations in the movements or the sensibility of the batrachian-For therapeutic purposes the authors employed extracts and tinc. tures of the plant, especially Adrian's tincture, and the results obtained, in the treatment of cardiac disease, have been more or less satisfactory. In summing up their conclusions, Boinet and Boy-Teissier found: (1) That ten minutes after the first injection, in the case of the frog, the cardiac energy was increased; (2) that this effect was transitory; (3) that it was only maintained under the influence of new doses; (4) that in large amounts the remedy diminished the cardiac pulsations, this being accompanied, at a later period, by irregular contractions of the heart; (5) that cactina in creased markedly the force of the heart without producing, as does the extract, a diminution of the pulse-rate; (6) that the tincture, in doses of forty-drops, has no therapeutic effect; (7) that in asystolic cardiac affections the tincture, in the same quantities, was similarly without any appreciable effect; (8) that in true cardiac disease, in which there was a latent want of proper compensation, daily doses of 80 to 100 drops raised the energy of a failing heart; (9) that in secondary cardiac symptoms, in arythmic conditions of nervous origin, daily doses of 80, 100 and 120 drops were well borne, and generally produced a regularity of the pulse; (10) that even with these large amounts, used for a considerable length of time, no untoward after-effects were observed in patients, nor any evidence of a cumulative action. - Univ. Med. Mag. - Bul. of Pharmacy.

CORRESPONDENCE.

DOES THE USE OF THE CURETTE EVER CAUSE ' RETAINED PLACENTA.

Messrs, Editors North Carolina Medical Journal:

DEAR SIRS:—I have, within the last twelve months, had in my practice three cases of retained placenta, and I have reason to believe that the curette was the cause of the trouble.

Case 1.—A negro woman, at 35, mother of several children, never had any difficulty with the placenta before. She suffered from hæmorrhage (menorrhagia), and the uterus was curetted some two years before the birth of her last child. I saw her several hours after the delivery of the child and found the placenta firmly adherent, every means was used to remove it, but without avail, and the patient died a few days later from exhaustion.

Case 2.—White woman, set 40, mother of four children, placenta always came away without any trouble. She had an abortion two years ago and she was troubled with metrorrhagia for some months afterward, and the curette used for her relief. In November, 1891, she was delivered of a child. I saw her several days afterward and found her suffering from septicemia as a result of a retained placenta, which was removed with great difficulty.

Case 3.—Woman (white), mother of two children, placenta came away without any difficulty in her first two confinements. Her uterus was curetted for hæmorrhage, and a few months afterward she became pregnant, the child was delivered at 10 o'clock at night, and the placenta, or a portion of it, some three hours afterward.

I wish to state that every means was used to detach the placenta in the cases mentioned above, both by the attending physicians and myself.

Sometimes after an abortion it becomes necessary to use the curette for hæmorrhage resulting from retained portions of the ovum. In order for the operation to prove successful the entire uterine raucus membrane must be thoroughly scraped and all granulations and fungus growths removed. In order to detach these growths considerable force must necessarily be used, and the sharp

curette must be the instrument. After using the sharp curette, in my opinion, the interior of the uterus is left as a rough, raw-like surface, secreting mucus and perhaps pus, and the surrounding parenchyma becomes corrugated and thickened, and when the parts heal a number of scars are left on the interior of the womb which becomes a very poor surface for the placenta to become attached, should the woman even become pregnant.

I simply report these cases, hoping thereby to call out the profession on this subject, and I hope if any physician has had cases similar to my own that he will report them through the columns of this JOURNAL.

Yours, very respectfully,

J. O. WALKER, M.D., Randleman, N. C.

CURRENT LITERATURE.

INTESTINAL DYSPEPSIA,

There is a form of dyspepsia which is predominantly intestinal. Chymification may be normally performed in the stomach (as is shown by the syphon), but the work of the stomach is not properly supplemented by those processes in the small intestines which elaborate the chyle and render it fit for absorption. Every physician in general practice has had cases which correspond to the following description: The patient has little or no trouble with the primary or gastric digestion, but some few hours after meals has attacks of flatulence with abdominal pains of greater or less severity, and this may be followed by diarrhæa.

Eructations of gas and the expulsion of flatus do not necessarily indicate faulty intestinal digestion, for the trouble may be purely of gastric origin (type—gastric dilatation, gastric neurasthenia), and it sometimes requires the utmost sagacity of the physician to determine in a given case the parts to be assigned respectively to gastric and intestinal indigestion. Often the flatulent distention can be topographically located in coils of the small intestine or in

the colon, while the stomach appears to be empty, or, at least, not distended. Gastrectasis can be differentiated by symptoms of its own; and always the use of the stomach syphon is an aid to accurate diagnosis by the certain information which it furnishes as to the quality of the gastric contents.

A peculiarity of intestinal dyspepsia is that it is principally the starchy and saccharine articles of food that give trouble. This might a priori be inferred, for the peptonization of albuminods is effected chiefly in the stomach, which, in the kind of dyspepsia under consideration, is supposed to be in a relatively normal condition. While, then, it is quite possible that the ingestion of an excess of albuminoids, over fatiguing the stomach, may cause intestinal embarrassment (and it is also possible that in rare instances exaggeration of the ordinary peristaltic movements may effect the same result, the ingesta being hurried out of the stomach before the work of chymifaction is half completed) and for all practical purposes the name intestinal dyspepsia may be considered as synonymous with starchy or amylaceous dyspepsia.

Is there a "buccal" or "salivary," due to lack of saliva? The relative part to be assigned to saliva in the conversion of starches has not yet been determined; it is doubtless insignificant as compared with that of the intestinal and pancreatic secretions.

The bile, pancreatic juice and the intestinal juice are the influential factors of intestinal digestion. Deficiency or perversion of any one of these fluids may cause indigestion, and it is possible that atony of the intestinal muscle—as a part of general muscular atony—may in some instances have an important rôle in indigestion.

The influence of bile on the intestinal digestion has long been known. Constipation and flatulence generally accompany deficiency or absence of bile; the rapid emaciation that is seen in the individuals or animals with biliary fistula also confirms the traditional physiological notion that the bile is an important agent in the emulsification of fats. Functional or organic derangements of the liver, then, may cause intestinal indigestion.

Deficiency or perversion of the pancreatic secretion will seriously derange chylification. The pancreatic juice possesses ferments which act on all the elements of food; albuminoids, carbo-hydrates and fats; the intestinal juices also transform starches and proteids. These are facts which are sufficiently trite; unfortunately it is

difficult, if not often impossible in a given case of dyspepsia, whose seat has been referred to the small intestines, to determine to which of the three factors of the intestinal digestive process the cause belogs, or whether all the glaudular secretions may not be about equally at fault. There are, it is true, some symptoms which point clearly enough to intestinal atony by acholia; we have, however, no symptoms which indicate with equal clearness failure function of the intestinal glands or pancreas. But even if we knew the morbid states productive of the digestive disturbances, we should seldom be able to influence these states directly by remedies; in other words, therapeutics must be symptomatic rather than etiological.

The brief hints which we shall give as to treatment will be comprised under the following heads: (1) Dietetics; (2) antiseptics; (3) eupeptic remedies; (4) purgatives.

(1) As this form of dyspepsia is generally predominantly a dyspepsia of starches, there is a leading indication to abstain from amylaceous and saccharine articles of diet. There should be a maximum of albuminoids—meat, eggs, fish and a minimum of carbo-hydrates and fats. Brilliant results have been obtained from a dict of raw meat—six, eight, even ten ounces of lean beef or mutton reduced to a pulp and cooked but slightly, if at all; to be eaten well seasoned, with a little bread, but without vegetables. Thin slices of underdone roast meat, fresh broiled fish, raw oysters and other shell-fish, soft boiled eggs, boiled ham. The latter, with sour-kraut, smoked herring, a little stale cheese, etc., has been recommended as being especially unlikely to undergo putrefactive decomposition.

There is no doubt that patients who have been the greatest sufferers from flatulence and colic, the result of intestinal indigestion, have often been marvellously benefited by this meat régime. For drinks, dilute soups, broths, watery solutions of the popular meat-extracts, are always preferable to milk, which is too liable to fermentation. Ales and all other fermented liquids are of course to be eschewed. The same may be said of puddings and gruels. If milk is to be proscribed, milk curds (without sugar) are not always objectionable.

Chronic indigestion is generally the result of flagrant dietetic errors. The individual has at some time indulged his appetite to

excess, and done this habitually; the digestive organs have become overburdened and functional derangements, if not gross organic lesions have resulted. Or food of a poor quality and indigestible, has overtaxed the apparatus of digestion. Here the main treatment must still be dictetic—the only indication capable of fulfilment being to give rest to the damaged organs till restitutio ad integrum takes place. The patient must be compelled to live sparingly, and on the kinds of food (principally azotized) which will digest best, and give the least trouble.

(2) There is no doubt as to the utility of antiseptic remedies (that is, remedies which prevent and counteract morbid fermentations) in intestinal dyspepsia. Combinations of chalk, bismuth, magnesia, salol, salicylate of soda, aromatics, are often beneficial. The patient may take after each meal a powder consisting of 5 grs. each of prepared chalk, magnesia and salol, or 5 grains each of salicylate of bismuth and naphthol. The addition to these powders of a little powdered nux vomica or columbo is often beneficial, especially where there is an indication to stimulate sluggish contractility. Turpentine is a remedy which some think has quite a wide range of usefulness.

Are there ever instances where exaggerated peristaltic movements are the principal cause, the ingesta being hurried out of the stomach into the intestines before gastric pertonization is half completed? If such cases could be diagnosticated there would be a clear indication for opiates and other remedies which diminish peristalsis.

(3) Among the "eupeptic" remedies (that is, remedies which favor digestion), must be mentioned, as being of predominant importance in the dyspepsia under consideration, malt-extracts contain disastase and are believed to be of benefit in amylaceous dyspepsia; this belief seems to be sanctioned by clinical experience. To be efficacious they should be given with the food.

Pancreatin, or pancreatic extract, has the earnest commendation of Dr. William Roberts in the British Medical Journal. He directs the usual dose (a teaspoonful of the extract, or 10 to 15 grains of purified pancreatin), to be given with 15 grains of bicarbonate of soda two hours after a meal, when intestinal digestion might be supposed to have fairly begun. Gubler recommended pancreatin to be given in capsules of wax, with the expectation that they would pass through the stomach unattacked by the

gastric juice and deposit their contents in the duodenum after the destruction of the waxy coating. There are various pharmaceutical preparations which profess to contain the three terments, diastaste, pepsin and pancreatin. Some physicians claim to have derived benefit from these combinations; others look upon the pretensions of their proprietors as illusory. These substances, being ferments, easily spoil, nor is their stability always ensured by combining them with alcohol, which more or less modifies their properties.

(4) The utility of purgatives in clearing the intestines of putrefying débris, of gases, ptomaïnes and microbes is unquestioned, but they are not to be given as a matter of routine, and only when constipation, colic or other symptoms indicate their administration. The relief which often follows a mild cathartic is great. Of course only the milder laxatives, and such as disturb digestion the least, are to be thought of. Rhubarb, senna, aloes, sulphur, cascara, magnesia, are among the best. A favorite combination is equal parts of pulverized rhubarb and cardamon seeds; dose, a teaspoonful. Germain Sée prefers the old formula of sulphur, cream of tartar and magnesia, of equal parts; Dujardin-Beaumetz, the compound licorice powder. The aloin, strychnia, belladonna and ipecac pill is an excellent one.

"The remedy," says Dr. G. B. Wood, "which we have found most effectual in the permanent cure of a disposition to the accumulation of flatus in the bowels, is an infusion made with half an ounce of columbo, half an ounce of ginger, a drachm of senna and a point of boiling water, and given in the dose of a wine-glassful three times a day.—Editorial in Boston Medical and Surgical Journal.

TREATMENT OF SUPPURATING INGUINAL GLANDS.

The surgeon frequently meets with cases of chronic suppurating glands, with one or more sinuses, which cause but little pain and inconvenience, yet have no tendency to heal save with perfect rest on the one hand, or with the more vigorous measures about to be described on the other.

The condition referred to is one occurring as a sequel to an excoriation of the lower extremity, a strain of the structures of the groin, or suppuration, without any definite history or objective sign indicating the cause. It is far from uncommon to find in surgical practice, say, a young woman, with absence of venereal sore, excoriation, discharge, or sign of injury, complaining of painful and swollen, perhaps suppurating, glands of one groin, and this, too, without evidence of struma or anemia. In a large percentage of cases, without any assignable cause, simple adenitis makes its appearance in connection with the glands running parallel with Poupart's ligament. The inflammation seldom ends in resolution, because the patient fails to recognize the importance of rest; thus suppuration ensues, and if the abscess discharge spontaneously, or if it be incised, a sinus remains, leading to a gland, and this passage is found to burrow both superficially and deeply. In these simple non-specific cases the granulations are doughty, velvety, anemic and easily separable. The pus undermines the skin with purple discoloration; the integuments are thinned, and the healing process is tedious in the extreme. The destruction involves the tissue around the glands rather than the glands themselves.

In a late experience of ten cases (males 3, females 7), in which chronic indolent sinuses existed, an anæsthetic was administered, and free scraping with Volkmann's sharp spoon performed, as well as the removal of the glands and sloughing adenoid tissue. The surface is first cleansed and rendered as far as possible aseptic. In practice it is not found necessary to divide bridges of tissue between neighboring sinuses, so long as the under surfaces of these are carefully scraped. The spoon is freely applied to all parts covered by granulations, and a smaller-sized instrument passed along the canals leading deeply. All exposed glands are torn away or twisted from their attachments and the bed on which they lie scraped. The cavity is washed out with a solution of chloride of zinc (gr. 20 to 5 i), a thick pad of antiseptic gauze is applied, and firm pressure maintained by means of a spica bandage. As a precautionary measure, and in the more extensive operations, in order to avoid movement an ontside bracket splint is used.

Cases of chronic suppurating adenitis, which have existed from two to four months, have, by the above-mentioned treatment, rapidly healed. A surface capable of throwing out healthy granulations is produced. The removal of the morbid tissue, which probably acts more or less as a foreign body, expedites the healing process. The coaptation of surfaces induced by pressure causes the permanent union of the parts concerned.

The benefit derived by the removal of supporting cervical glands, as advocated by Mr. Teale, Mr. Treves, and others, is thus secured by a similar operation in other regions. As contrasted with the neck, in the groin we have to deal with tissues which are less firm, and pus is more disposed to burrow; hence the importance of renovating, so to speak, the undermined integuments. By this means a simple and efficacious remedy has been found for the long-lasting misery experienced by those afflicted with suppurating adenitis.—

Practitioner.

PEROXIDE OF HYDROGEN AS A THERAPEUTIC AND DIAGNOSTIC AGENT.

During the last few years so many articles have been published in which the indications for, and the results obtained from, the use of peroxide of hydrogen have been given, that anything further on that subject may be deemed superfluous. While, for a large number of physicians this may be true, still, owing to the great conservatism of our profession, and the immense number of new remedies clamoring for recognitiou and adoption, many really valuable remedial agents receive but a passing glance, and are forgot ten by the great majority of readers. While considering these-facts, and the remarkably satisfactory results I have obtained from the use of this remedy, it occurred to me that a short article on this subject might not be entirely without value.

A reliable preparation or solution of peroxide of hydrogen is one of our most potent germicidal agents; it is also an excellent deodorizer, but its most characteristic property is the extreme avidity with which it combines with and decomposes pus. No matter where situated, or how small the quantity, the presence of pus is at once indicated by the effervescing, foaming action produced by the oxidizing power of the peroxide of hydrogen. This peculiar property renders it exceedingly valuable in deodorizing and clean-

sing foul ulcers, abscesses, or any pathological condition attended by a discharge, and especially so if the pus is tenacious, adherent and difficult to remove.

I have used this remedy with very satisfactory results in a large number of diseased conditions, especially those attended by suppuration, sloughing, or tissue necrosis of any kind. To be effective, however, the solution must be *fresh* and *active*; it should be kept in well-corked bottles and in a cool place, otherwise it rapidly deteriorates and becomes inert. The following are a few of the diseases in which I have used the remedy:

Diphtheria.—In this dread disease it yields excellent results; the foul odor is neutralized, the membrane becomes friable, less adherent, and often disappears in a few days, and the general symptoms of toxamia are mitigated. It is value is increased by the addition of 1 grain of bichloride of mercury to from 4 to 8 ounces of the solution. This mixture has probably no superior as a local application for diphtheria.

Gonorrhea.—As an injection the following combination has yielded good results:

B.—Hydrargyri bichloridigr. i.	
Hydrogenis peroxidi solf 5 ii.	
Aquæ, q.s. adf 🤋 vi	

M. Sig. Inject, after urinating, two or three times a day.

In diseases of the nose and throat it has a cooling, soothing, cleansing and disinfectant action. I prefer a solution of about one-third the ordinary strength, and a mixture composed of 1 part hydrogen peroxide and 2 parts concentrated distilled extract of witch hazel (Parke, Davis & Co's) has acted very nicely in my hands.

I have also obtained very satisfactory results from the same mixture in gynæcological practice. With it the parts can be very promptly cleansed and disinfected. I have also used peroxide or hydrogen as a diagnostic agent to determine the presence of pus in deep-seated abscesses or inflamed glands, in which commencing suppuration was suspected. In such cases, especially when the abscess or gland is in close proximity to important structures, as in the inguinal and axillary regions, this agent may be made to rende

material assistance, and lessen the danger of wounding important vessels and nerves.

My method of procedure is as follows: Inject the peroxide solution, by means of a hypodermic syringe, into the suppurating cavity. This immediately produces oxidation of the contained pus, marked distention of the cavity, and stretching and elevation of the superimposed tissues, thereby lessening the danger of wounding important structures.

Before injecting the cavity, however, the surgeon should have everything in readiness to evacuate the abscess immediately when the distention occurs, otherwise unnecessary pain will be caused. The incision should be free, and the cavity thoroughly washed out with the peroxide solution until the foaming action ceases, and then dressed with bichloride of mercury gauze. I have in this manner operated on extensive suppurating buboes, which healed without a particle of subsequent suppuration, and, indeed, did not require any further attention. This result I attribute largely to the absolute cleanliness that can be secured by the peroxide solution, thereby placing the diseased part in the most favorable condition for speedy repair.

In conclusion, I would present the following summary:

- 1. A reliable solution of peroxide of hydrogen is an efficient and safe germicide.
- 2. By its oxidizing power it rapidly decomposes pus, diphtheritic membranes, and other pathological decayed products.
- 3. It is an excellent deodorizer and a non-irritating, cleansing agent for foul wounds, abscesses, etc.
- 4. It is a valuable diagnostic agent in determining the presence of pus, and by its use in operations the danger of wounding important structures can be lessened.—E. Stuver, M.S., M.D., Rawlings, Wyoming, in Therapeutic Gazette.

In constipation of infants a useful remedy (Medical and Surgical Reporter) is three-grain doses of equal parts of calcined magnesia, powdered rhubarb and oleo-saccharure of anise. The latter is made by mixing one part of oil of anise with eight parts of powdered sugar.

SOCIETY MEETING.

THE BUNCOMBE COUNTY MEDICAL SOCIETY.

The stated meeting of the above Society was held at Asheville, on March 14th, 1892, the President, Dr. Karl von Ruck, in the chair.

Dr. Weaver read a paper on "Sepsis," including in the term pyæmia, septicæmia, suppurative fever, and kindred intoxications, all due to the entrance into the blood of the pus germs and their products. According to the rapidity of their multiplications and favorable conditions for absorption of their products, the clinical picture is more or less severe. Pyæmic abscesses occur from the transportation into the blood current of infected emboli detached from clots of wounds or occluded vessels, and the severer forms prove, as a rule, fatal.

The pus germs thrive best upon devitalized tissues, having not yet undergone decomposition, and surgical wounds offer ideal conditions for their growth, if they find entrance.

He denies the occurrence of spontaneous sepsis, and believes that in all such cases infection must have preceded—laudable pus never exists, the pus germs are the cause of all suppuration.

In the treatment prevention is the only resource, and beyond supporting treatment there is none that can avail the patient.

The essayist then related a case in which from a scratch upon the knuckle of one finger intense swelling and suppuration resulted rapidly. Upon disarticulation of the finger at the meta-carpal joint, a deep abscess in the hand was discovered on the third day, and the patient presented the symptoms of general infection, the abscess was evacuated and the cavity thoroughly disinfected with corrosive sublimate solutions, but the process continued with the formation of multiple abscesses in various parts of the body, ending rapidly in the death of the patient, despite all local and general treatment that he and his colleagues could devise.

DISCUSSION.

Dr. Battle agreed with the writer in his views and stated that,

owing to the advances made in wound treatment, such cases as related by the author were fortunately becoming more and more infrequent.

Dr. Taylor could not take so hopeless a view as to the prognosis in even severe cases of septic infection, and related the case of a patient who had previously been treated in Philadelphia on account of septic infection from a post-mortem wound; when he came under his care he presented the condition of chronic sepsis, having some 160 ulcers upon the integument, with great tendency to hemorrhage, in addition to frequent epistaxis, requiring upon several instances plugging of the nerves. Syphilis was excluded. Subsequently periosteal abscesses, albuminuria and abdominal dropsy developed, and the case became to all appearances a hopeless one. Nevertheless, by unremitting efforts, a complete recovery resulted, and the patient now, a year later, enjoys perfect health,

Dr. Burroughs agreed with Dr. Taylor, and related a severe case of septic infection contracted by a nurse from a puerperal woman. There was rapid swelling of the infected finger, hand and arm, severe rigors and high temperature, and he attributes her recovery to the free use of tincture of chloride of iron and of whiskey in full doses, together with proper local treatment.

Dr. Taylor reported a case of belladonna poisoning occurring in a lady who had applied a belladonna plaster to her back. The symptoms were mild delirium, dilated pupils and dry throat, and, owing to the denial of the patient and friends, of medicine or eye-drops having been used, much perplexity existed for a time, until the accidental discovery of the plaster.

Dr. Fletcher had seen some cases of belladonna poisoning which were accompanied with high temperature as a symptom, and asked Dr. Taylor if he observed fever in his case.

In reply Dr. Taylor stated that, although he had not taken the patient's temperature, he was quite sure that there had not been any material elevation.

The Society then adjourned.

CHANGE OF DATE OF THE MAY MEETING

OF THE

MEDICAL SOCIETY TO THE 17th DAY OF MAY,

ONE WEEK EARLIER THAN STATED!

The Local Committee of Arrangements, upon the urgent solicitation of several members, who were also members of the Association of Railway Engineers, saw no objection to changing the date of the meeting so as to allow these gentlemen to be present at both meetings. The Local Committee of the Wilmington Medical Society did this with the desire to make everything as pleasant as possible to the greatest number. They propose now to stand by the new date, MAY 17th, although we have found out since that it was a mistake to change from the first date provisionally set by the Committee.

All the provisions having been made for the 17th MAY, we could not alter it again without confusion.

Tubercular Peritonitis Cured by Laparotomy and Drainage.—Dr. Lindner (Medical Press) relates a case as follows: A., aged 5, was admitted into the Augusta Hospital with tubercular peritonitis and right-sided pleural exudation. Tapping was per formed and half a liter of fluid withdrawn. As the success was nil, laparotomy was performed. The peritoneum, which was thickly studded with tubercle, was washed out with an antiseptic solution. Two and a-half liters of fluid were removed. The mesentery and intestines were firmly adherent. After a number of complications, improvement set in, the pleuritic effusion disappeared, and after a sojourn by the North Sea the boy recovered complete health.—
Arch. Gynec., Obs. and Pediatrics.

CURRENT NOTES.

The following are the officers of the Pan-American Medical Congress: William Pepper, M.D., LL.D., Philadelphia, Pa., President. Abraham M. Owen, A.M., M.D., Evansville, Ind, Treasurer. Charles A. L. Reed, M.D., Cincinnati, O., Secretary General.

Charaka-Samhira.—We acknowledge the kindness of Kaviraj Abinash Chunder Kaviratna in sending us the first fasciculus of this translation of Charaka-Samhita, which is said to be one of the foremost of the Sanskrit treatises on medicine. Its translation will greatly interest Sanscrit scholars, and will be an addition of some very curious material as a part of the crude beginnings of medicine. We will watch with interest the succeeding numbers.

The Committee appointed at the last meeting of the American Medical Association to consider the best means for promoting the prosperity of the sections of the Association will hold an adjourned meeting in the Hotel Cadillæ, Detroit, Michigan, June 6, at 3 p. m. Members of the Committee are requested to notify the Chairman of their intention to be present at this meeting. The Committee would esteem it a favor if each member of the Association would communicate in writing his or her views concerning the best measures for promoting the development of the sections. Such communications may be sent to the chairman of the Committee, John S. Marshall, M.D., 9 Jackson St., Chicago.

IDENTIFICATION OF BLOOD.—We take pleasure in calling the attention of our readers to an article in the American Druggist of March 1st, 1892, an article on the identification of blood, by Dr. Charles O. Curtman, Professor of Chemistry in the Missouri Medical College. His revision of the method of the detection of blood by tineture guaiac is valuable. He advises the making of a fresh weak tineture from the guaiac chips, or a bit of the gum taken from the interior of lump. A few drops of ozonized ether (made by shaking equal parts of sulphuric ether and hydrogen peroxide) are added to the tineture of guaiac and the mixture applied to the blood-stain or to a solution of the blood, when a blue reaction ensues. This test has the disadvantage of producing the same reaction in the presence of malt extract and leather, so that the

absence of these two substances should be determined to make it accurate.

OPIATES IN PNEUMONIA.—"For the distressing cough and the pain in the side, opium in some form may be given, either the hypodermic of morphia, or, for the cough alone, Dover's powder. There has been a feeling in the profession that opium was counterindicated in pneumonia, but I fully agree with Loomis, that it may be given with safety and with the greatest comfort to the patient."—Osler's Practice of Medicine.

NEW BUILDINGS FOR THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.—The Board of Trustees and the Faculty of the Jefferson Medical College have just completed the purchase of two large lots on Broad street, giving them a frontage of about 300 feet and a depth of 150 feet, upon which they will proceed to erect at once a handsome hospital, lecture hall and laboratory building. The estimated cost of the building is \$500,000. The hospital will be built not only as a suitable building in which to care for the sick and injured, but also will be provided with a large amphitheatre for clinical lectures. The basement of the hospital building will be given over to the various dispensaries, each of which will be provided with large waiting and physician's rooms as well as rooms for direct teaching of the students. The building will be absolutely fire-proof and provided with patent sprinklers in case their contents catch fire. By the erection of three commodious buildings the laboratories where delicate work with the microscope or apparatus is carried on, will be separated from the college hall, where didactic lectures are given, and so will be free from any jarring produced by the movement of large classes. With the hospital on one side, affording clinical facilities, and the laboratory on the other side of the College for scientific research and training, the College will be most favorably situated for giving thorough instruction in medicine. Further than this, immediately across the street is the Howard Hospital, and on the adjoining corner the Ridgway Branch of the Philadelphia Free Library, which contains all the scientific works belonging to this wealthy corporation. The new site is more favorably situated in regard to the centre of the city than the old one at Tenth and Sansom streets. The move has been made necessary by the large number of students who are now being instructed in this Institution, and because the Faculty desire to keep the school and hospital in the foremost rank of medical education in this country. The buildings will be ready for occupancy in the session of '93-'94.

EXTRACT FROM NOTES ON DIURETIN BY H. H. HARE, M.D.-The fourth case was that of an old man of 60, who had concentrated urine and suffered from an enlarged prostate. In the dose of one hundred and twenty grains a day the diuretin decreased his urine instead of increasing it, although the decrease was very slight. The great difficulty in measuring his urine, owing to his lack of vesical control, prevented a carefully prepared table from being kept. In order to determine whether any particular value lay in diuretin (Knoll) or in the sodio-salicylate of theobromine made by Merck, both preparations were employed alternately without any difference in result. As an example of the fact that an investigation should never be considered complete without control experiments, it is interesting to note that a patient who was passing twenty ounces of urine a day was ordered diuretin, but owing to unavoidable delay failed to receive it at once. In the next twenty-four hours he passed sixty ounces of urine without any drug being given, an increase which would have been assigned to the diuretin had it been administered. Perhaps no better example of the price which can be put upon a name can be found than in the example before us. Diuretin (Knoll) costs two dollars and fifty cents an ounce, but sodio-salicylate of theobromine (Merck) costs fifty cents an ounce, or one-fifth as much. At the dose of 2 drachms a day the drug at the first price becomes an impossibility to many persons—an advantage in a name to a patentee and a disadvantage to the long suffering public-while at the latter it is purchasable by a large number.—Therapeutic Gazette.

"Our Ideas of the Liver—derived, as they generally are, from the organ in the dissecting room or on the *post-mortem* table—are frequently quite erroneous, for we are apt to believe it to be a hard, solid, unyielding organ, whereas, on the contrary, a sponge would more nearly represent its behavior. If we take the liver of an animal—such as a rabbit—which has first been killed, and pass a current of defibrinated blood through it by means of cannulæ tied into the portal and hepatic veins, we find that the organ swells up

enormously or becomes quite small in proportion to the pressure with which the blood is driven through it. The rapidity with which this distension and collapse occur is so great as to remind one, indeed, of the variations of the india-rubber ball of a sprayproducer. On looking at such an experiment the first thing that strikes us is the question: If the liver contracts so readily under the variations of blood-pressure within it, why do we find the side of the liver so constant in man? why does it not expand and contract as we see it do in the laboratory? The answer to this is, I think, a very simple one; it is that the blood circulates in the portal vein under a very low pressure indeed, one which is not at all to be compared either with the pressure used in the experiment or that which exists nominally in the arterial system. But every now and then we see changes in living men quite as great, though not so rapid as in the excised liver of the rabbit, of which we have just been speaking. Such changes are especially common in men who suffer from malarial fever, though we see them quite as markedly in the subjects of advanced mitral disease."—Lauder Brunton in British Medical Journal

Two Methods.—To a physician of Philadelphia, widely known and greatly honored, an enterprising firm of dealers in wine lately sent a most lavish and costly case of "samples" of their "medicinal" beverages. The enterprising firm was thanked, and politely . informed that the present had been re-presented to ---- Hospital. Another physician writes an effusive and laudatory letter in praise of the wine, as regards its prophylactic and curative properties in disease, and this letter will doubtless be poked under the nose of every one of us for years to come. In certifying to the superior excellences of one special preparation, it goes without saying that, as a scientific man, the physician has made impartial scientific analysis and tests of all competing preparations of the kind, and chemically, physiologically and therapeutically is disinterestedly certain that the one he pronounces the best is really so. If he has not done so his certificate is a farce, and he has unjustly discriminated against other preparations, possibly equally as good, the makers of which trust to the qualities of the preparations rather than to sly advertising dodges. But, whatever the fact, either he has been foolish enough to give a valuable thing for nothing, or he has had value received for the puff.—Medical News.

Hydrastanin.—Dr. Paul Strassmann, in the Deutsche med. Wochenschrift, 1891, No. 47, S. 1283, presents a very thoughtful paper upon this drug, which is to be distinguished from hydrastin. The dose is: in form of pill, one-half grain each; in subcutaneous injection, one to two grains. The results of administration in twenty-seven cases led him to believe it to be a very valuable remedy in the menorrhagias and metrorrhagias due to various pathological conditions so often met with in gynecological practice. At present, however, the remedy is quite expensive. [This preparation bids fair to displace the use of the fluid extract of hydrastis candensis, now so widespread in this country.]—American Journal of the Medical Sciences.

TURPENTINE IN THE TREATMENT OF RENAL CALCULI AND GALL STONES.-Dr. C. H. Ralfe, in the Lancet, 1891, ii., p. 1271, states that the object of the administration of turpentine in conjunction with so called solvents and diuretics is to assist in the expulsion of any concretion already formed, and to prevent the formation of others. The mode of action in causing expulsion has been stated to be from its powerful diuretic action, especially if given in small doses for sometime; but if there is much colic and a tendency for the stone to pass, it may cause strangury, and thus have an opposite tendency, It also decidedly increases the colic, and it would appear as if it actively stimulated the muscular fibres of the pelvis, of the kidneys and ureters, and also of the gall-bladder and bile-ducts. In long-standing cases turpentine aids the passage of a calculus by improving the condition of the mucous surfoce of the ureters and bile-ducts; for by diminishing the swelling caused by the catarrh there is less resistance presented to thr onward passage of the concretion, and especially allowing it to pass if it is quite small. As a preventive it renders the secretion less tenacious and viscid-that colloid medium, which writers insist upon as essential to the development of concretions. It also acts as an antiseptic on the bile secreted, and thus prevents the precipitation of cholesterin, which becomes less soluble as bile loses its alkaline reaction-which takes place when fermentation sets in. Durande's elixir is mentioned (one part of sulphuric ether to two of turpentine), and as well the method of Trousseau (a combination of alkalies with turpentine, administered in capsules.)— American Journal of the Medical Sciences.

THE INCUBATION OF VARICELLA.—Dr. Talamon (La Medicine Moderne, 1891, No. 32) has observed two cases which have given an opportunity of establishing beyond dispute the incubative period of this disease. The patients were a girl and a boy, and the interval between the day of contagion and the appearance of the first symptoms was in each case thirteen days. This agrees with the figures given by Gerhardt—thirteen to fourteen days.—American Journal of the Medical Sciences.

Gibney on the Diagnosis and Treatment of Hip-Joint Disease.—Six cases are reported in detail, and the following conclusions are reached: (1) An early diagnosis can be made by any one who examines the case carefully, and who familiarzes himself with the functions of a sound joint. (2) The necessity of regarding a case as chronic, and therefore requiring prolonged protection of the joint. (3) The comfort that any patient may derive from an apparatus that is made to fit. (4) The benign progress of a case thus protected. (5) The importance of maintaining parallelism and equality of the limbs at all times and under all circumstances. (6) The advantages of an cut-of-door life, which cannot be secured by bed treatment. (7) The necessity for excision of the hip when well directed efforts at securing rest and protection to the joints have failed.—Boston Med. and Surg. Jour.

Posture in Angina Pectoris (Revue générale de Clinique et de Thérapeutique, No. 4, 1892, by H. Huchard.—Attacks of angina pectoris are almost always accompanied by increase of the arterial tension, and amyl nitrite owes its success mainly to its power of diminishing this increased blood tension. The theory of increased arterial tension explains the production of anginal attacks by all those causes, which increase the work of the heart and vascular pressure. The author looks upon the fact of the production of these anginal attacks by all acts requiring an effort or producing arterio-capillary spasm, as one of great importance, and lays down the following rules with regard to diagnosis: (1) Angina pectoris brought on by any effort whatsoever, by rapid walking, etc., is a true angina; (2) angina pectoris occurring spontaneously, without the intervention of any act requiring an effort, is a false angina. This is an important point in the diagnosis, for death may occur from the first form of angina, but death never occurs in the second

form. It has long been known, however, that severe attacks of angina occur during the night, and Huchard lays down a third rule; (3) when a patient, subject to crises brought on by effort, has a spontaneous attack during the night, the first rule is not defective; the attack is one of true angina. Anginal patients prefer instinctively the vertical posture Patients suffering from repeated and frequent attacks of angina often refuse to lie down, because such a posture is intolerable. It has been shown that the recumbent posture and sleep alone increase the arterial tension, and the vertical posture diminishes it. This is the explanation of the nocturnal anginal attacks, and of the attitude preferred instinctively by the patients. The increased arterial tension of sleep is due not only to the recumbent posture, but also to the nocturnal auto-intoxication of the organism. Since the author's attention was drawn to this subject he has always recommended anginal patients (especially those who have crises during the night) never to lie with the head low, and in this way he has succeeded in preventing the nocturnal crises of a patient who lived in continuous fear of death.-Medical Chronicle

HYPERTROPHY OF THE PROSTATE.—Hypertrophy of the prostate is often regarded as a hopeless condition, both from a medical and a surgical standpoint. I have, however, recently had two cases of cure of the prostate enlargement. The first case was that of a gentleman seventy three years of age, who was sent to me some years ago with an old-standing enlarged prostate. He was treated by me after the plan of a mild negative electrolysis in the urethra. The applications were made twice a week, the current strength being from five to ten milliamperes. I subsequently increased the dosage to twenty-five milliamperes, which produced considerable irritation. The duration of each application was from three to five minutes. This was repeated three or four times, when I lost sight of the case. Two years afterward I met the physician who sent him to me, and learned that the patient claimed that he was entirely well.—Dr. G. Betton Massey, in Cour. of Med.

THE BATTLE OF THE BACILLI.—The Lancet of 9th January has an interesting article on the methods of warfare employed by bacilli in attacking animal life, and from which we cull a few choice sentences: "The outworks of the fortress are extensive, the de-

fenders are few and scattered, but active and capable of quick concentration. It may sometimes happen, therefore, that the numbers of the enemy admitted are insufficient to gain a footing, and, after a more or less severe contest, are overcome, their bodies squeezed and sucked, and then thrown out; or, on the other hand, it may happen that the garrison, tired and exhausted, or taken by surprise by a large body of the enemy, are unable to resist, and then utter rout and destruction are the result. * * * Thus 250,000,000 of staphylococci injected into a rabbit will produce an abscess in this animal, but 1,000 millions of the same parasite will cause death. A few drops of a culture of the bacillus pyocyansus injected into the veins of a rabbit give rise to a chronic disease, whereas, a quarter of a obbic centimetre of the same culture kills the animal with certainty. The nature or virulence of the microbes introduced, the animal experimented on, and the mode in which the introduction is effected—as, for example, into the blood itself or into the subcutaneous connective tissue—are all circumstances that materially modify the result. Still it is interesting to inquire by what means the injurious effects caused by a minute quantity of the poisonous fluid injected are prevented, when it can be easily demonstrated that a slightly larger quantity proves fatal."—Sanitary Journal.

MAMMARY ABSCESS-PREVENTION OF.-Tarnier (Journal des Sages Femmes, December 16, 1891, Brit. Med. Jour.) insists upon women being kept very clean in childbed. Their hands must be washed, else the nipple may be contaminated by a finger that has just touched the vulva. The nipple should be washed both before and after every act of suckling, with water that has been boiled, or with a solution of boric acid. The washing must be done with clean lint or sterilized wool, and not with a sponge. The preliminary washing is necessary, as there might be microbes on the nipple, and the child's mouth might transfer them to a minute fissure, frequent on the nipple after delivery. The second washing removes from the nipple all milk which, if left there, might become a breeding ground for germs, and thus set up abscess, or infect the child's mouth and cause aphthæ. Professor Tarnier takes a stronger precaution in his wards. Every woman has her breasts dressed, as a preventive measure, with a compress soaked in a 1-5000 sublimate

solution, held in place by strapping, as the pad is likely to slip; a band of gauze is passed round the thorax and wound around the breasts, so as to envelop them completely. There were, in consequence, only two cases of abscess of the breast from November 1, 1889, to July 15, 1890, and in both the mammæ were, for different reasons, neglected. This application of sublimate cannot possibly hurt the fetus. A syphilitic infant can safely take 5 minims of Van Swieten's solution. The equivalent of that dose in a 1-5000 sublimate solution would be 25 drops, and a child suckling a breast dressed as above described could hardly swallow a trace of the mercury.—Archiv. of Gyncec, Obstet. and Pediat.

IRRITABLE BLADDER—ELECTRICAL TREATMENT OF.—Grapow, (Centralblatt für Gynäkologie, 1891, No. 44; Am J. Med. Sci.) reports three cases of enuresis in young women between the ages of seventeen and nineteen years, in one of whom the condition had persisted since childhood. He used the faradic current with the bipolar electrode introduced into the bladder. Ten séances were given, of five minutes each, the secondary current of moderate strength being used. In two cases the trouble disappeared after the first application; in the third it persisted only until after the following menstrual period.—Archives of Gynæcology, etc.

EUROPHEN.—This new iodine compound, continues to give very satisfactory results to practitioners, so much so that it is difficult as yet to place well-defined limitations as to its final value in therapeutics. As a substitute for iodoform, it has an admirable action, causing prompt cicatrization and insuring the operative field against further morbid degeneration. It has the further advantages of being a perfectly safe application, and is free from disagreeable odor, while it possesses a covering power five times greater than that of iodoform. It is unsurpassed as a surgical dressing, forming an adherent coating over tissue lesions and on mucou surfaces. It is used in all ucerative and muco-inflammatory conditions, external and cavital. Hypodermically, Europhen has been advantageously used in constitutional syphilis, the amount injected being \(^2\) to 1\(^1\) grains, in a syringeful of oil, once daily. It is better to begin with the smaller amount.

INOCULATION IN NORTH CAROLINA.

Messrs. Editors North Carolina Medical Journal:

DEAR SIRS:—In "Current Notes" of the JOURNAL for January, page 54, mention is made of Dr. Hugh Williamson's visit to New Bern in 1779, "for the purpose of communicating the small-pox to such as had not experienced the benefits of inoculation," and in this connection the question is asked, "Is this the first inoculation against small-pox practised in North Carolina?"

Hardly, I think. A letter of Col. Alexander Martin, of the 2d Regiment of North Carolina Continentals, to Gen. Washington, written from Alexandria, Va., under date of May 16th, 1777, reports to Washington that the "First Division" of the North Carolina Brigade had halted at that town for "inoculation." This was two years before Williamson's visit to New Bern. Col. Martin, as senior officer, was in command of the advance of Nash's North Carolina Brigade, then on its way to join the Northern Army.

True, this inoculation of the troops was not done in North Carolina, but it must have been by the several regimental surgeons, and Martin's letter gives evidence of a familiarity with the operation and knowledge of its beneficial effects. A fair inference is that it was well known and practised at home.

What regiments constituted the "First Division," besides the 2d, Col. Martin, afterwards Governor, and the 3d, Col. Jethro Sumner, afterwards Brigadier General, the writer cannot say, but the surgeons of the two mentioned were William McClure, of the 2d, and William Ridley, of the 3d. William Usher had been surgeon a very short time before the date of Col. Martin's letter, and may have been with the 3d Regiment at that time, but was more probably with the 4th, to which he was transferred.

The letter of Col. Martin referred to is in the State Department at Washington, D. C., among the "Letters to Washington," book 15, page 212.

Graham Daves.

Dr. D. Hayes Agnew died at his residence in Philadelphia March 22d, 1892. We will have a full obituary notice in the April Journal.

READING NOTICES.

For the past year or two I have been using Peacock's Bromides with good success, and from my experience find it the most satisfactory of any of that class of preparations now on the market.

Lamonte. Mo.

A. Conway, M.D.

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No. 4.7

ORIGINAL COMMUNICATIONS:

WILMINGTON, APRIL, 1892. [Vol. XXIX

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REVOLUTION

-IN-

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M.D.,
GEO. GILLETT THOMAS, M.D.,

Number 4.

Wilmington, April, 1892.

Vol. 29.

ORIGINAL COMMUNICATIONS.

A SCIENTIFIC CURE FOR HERNIA.

By Benjamin T. Shimwell, M.D., Lecturer on Surgery in the Medico-Chirurgical College.

(Read March 9, 1892.)

All methods devised for the radical cure of hernia seek to reach their object by obliteration of the canal, and by this plan to retain the protruding gut. This is the treatment of effect, not of cause.

While fully recognizing the comparative frequency of this trouble, we must not overlook the fact that it is in the minority. As we are all subject to the same exciting causes we should look for some anatomical reason that will explain its occurrence and non-occurrence, and why after operation, where fibrous tissue in

apparent quantity existed, return was possible. There must be more than the production, or rather reproduction, of a canal from the abdomen to the scrotum to account for it.

The first thing, then, to consider is not the inguinal rings or canal, but the intestines, the prime factor in the case.

The intestines are not a tube lying perfectly free in the abdominal cavity to be pushed here and there, making pressure at this or that point. If they were attached but to the pyloric end of the stomach and to the anus, then it could readily be seen how intraabdominal pressure could possibly rupture any weakened point in the belly wall, with consequent protrusion of the gut. Instead of being so arranged, their position and action are limited by the folding around them of the peritoneum forming the mesentery.

Careful examination of the body in the dead-room fixes a normal relative position for this limiting membrane. Its point of attachment to the parietes begins to the left of the second lumbar vertebra. Its insertion then follows a line obliquely downward and to the right, to attach itself on the right iliac fossa. Its average length is eight inches; an increase above this is an abnormal state, and on this increase in length depends the production of hernia. The examination of numbers of bodies has proved, beyond cavil, that when a normal condition of the mesentery exists, it is impossible to drag the gut into the inguinal or femoral rings.

Is it scientific to say it is chance that prevents the whole human race from having hernia? Also to lay it to the firmness of attachments of the opposing surfaces of the inguinal canal, or the structures that cover a present hernia? The pushing forward of the superimposing layers of tissue and separation of the obliterated canal speak ill for its preventive power. If they are preventive, then the sudden rupture would give us more serious consequences in primary protrusion than experience shows. The canal does not show the after-conditions that follow usually from tearing, which would be excessively marked here if strong union had taken place. Neither subjective nor objective symptoms are present. It is coaptation, not union with firm tissue formation.

It is clear to my mind that the normal length of the mesentery is the preventive factor in the non-production of hernia. If not so, then no one could escape. The exigencies of life and our surrounding conditions are such that all of us at times are subjected to violent strains, giving rise to intra-abdominal pressure sufficient to rupture the internal openings, and to allow the gut to enter the canal.

If these assertions are true, then any operation which has been suggested does not prevent, but modifies. Therefore, any procedure seeking to prevent hernia by obliteration of the sac does not cure. The possibility of return exists.

What is the rational treatment? The opening of the abdomen and shortening of the mesentery. The width of the mesentery does not increase in adult life, but the length is liable to.

The opening of the abdomen and shortening of the mesentery may be objected to on the ground of possible risks. The safety of the operation of abdominal section is settled. The shortening of the mesentery offers no objections. It may be said that the blood supply of the intestines may be interfered with. Careful experiments show the reverse.

Further, to prove that peritoneal inflammatory changes do not affect the blood-supply, is instanced in the omentum after diffuse peritonitis. Operations during the acute stage and post-mortems have shown me conclusively the possibility of contraction occurring without strangulation. In every case of acute peritonitis, unless adhesions have taken place, or, in fact, any case where the omentum has been much handled, we always find it drawn up to its gastro-duodenal attachment as a knotted mass. Still its vitality is maintained. Also, the invaginated mesentery into the divided bowel, in the operation of intestinal anastomosis, does not lose its vitality by contraction and inflammation. Here there is not only change by contraction due to the invagination, but also thickening from the inflammatory products thrown in and about its attachment. That this portion of the mesentery still supplies the bowel with blood is proven by the number of experiments I made, to show that division of the mesentery at the point of invagination caused gangrene. This proves that, though changed in its structure pathologically, it does not interfere with its nutritive function as a carrier of blood.

It is understood that the value of an operation lies as much in its freedom from risks as in its ability to maintain its advantages when successful. The freedom from risk has been one of the so-called advantages claimed for the radical cure suggested. Can this be

truly said of these methods? It is not always in the province of any operator to say when the operation is finished that he has not divided the spermatic duct. This is not recognized in unilateral operations, providing the other organ and duct is viable, but if not, or if in any subsequent time inflammatory change takes place, it is plainly seen the disadvantages that would arise. There is also the possible atrophy of the testicle from injury to its nerve-supply. Then, again, sharp attacks of peritonitis have occurred with consequent changes. There is a law of serous cavities that is definite: "Any inflammation, unless limited by adhesive contact, is diffused over the whole surface." This will hold as good here as in an operation done through section.

The longest part of the mesentery is usually confined to about five feet of the bowel included in a space beginning at a point six feet from the duodenum. If this is above the average length it is apt to hang into the pelvis, and is, in all probability, the portion protruded. It is but reasonable to suppose it is the same loop that is recurrent in its extrusion. There would be no difficulty in locating this portion, as the hernia would be present.

The shortening is done by folding the mesentery over on itself, and holding in this position by interrupted sutures. The intestine can be delivered, folded, sutured, and then replaced, and successive portiont so operated upon. This is a step that of necessity requires expertness in handling the intestine that is only got by practice. The delicacy of the mesenteric tissue is understood. The union of the attached surfaces is rapid, and having been so shortened, there is no possibility of relengthening. Experiments, operations and post-mortens in cases which had peritonitis, show persistent shortening of the meseutery, the intestines being drawn nearer the spine.

The operation can be done perfectly aseptic, obviating risks. The bowel is not injured. It is done quickly, closure is made, and the patient out of bed in a few days.

DISCUSSION.

Dr. Joseph Hoffman: Dr. Shimwell's suggestion can certainly claim the merit of being new, but any procedure which strives to cure hernia by it must fail. If the portion of bowel that presented was always the same, the procedure might be logical. It is, however, founded upon a false conception of the condition present.

These conditions probably do not obtain in the greatest number of cases, and consequently the methods cannot be really a cure for the condition. Other things besides the bowel may constitute the hernia. In woman the ovary may be present. The appendix may get into the ring, and shortening of the mesentery will hardly cure that. Further than this, the omentum may constitute hernia This is a prolific cause of hernia. It is probably at the bottom of most hernias primarily, and in many cases it precedes the bowel. We often find nothing in the ring. Strangulation has occurred and the gut slipped back, and the strangulation is back of the ring

So far as considering shortening of the mesentery as a cure for hernia, we must understand what we mean by cure. Those who have done the most radical operations for hernia are not bold enough to say that they have cured a case—that is to say, so cured it that it will not come back. It cannot be held that such an operation will cure the predisposition for lengthening of the mesentery. So far as shortening of this tissue by inflammation is concerned, that is entirely theoretical. We cannot say that because the mesentery is thickened, it is shortened. The suggestion, while it has apparently a foundation in fact, must be taken entirely as experimental, and experimental in the line that it is not likely to be followed by practical results.

Dr. George E. Shoemaker: It is easy to decry anything which is unusual, yet every method must stand on its own merits. No consideration of this subject is complete which ignores the congenital defects of the ring, since these are at the bottom of many hernias. We find congenital hernia in the very young. Later in life the rings may be too large and weak from congenital defect, although no hernia is present, but a strain is suddenly thrown upon the parts and a hernia is produced. Such a shortening of the mesentery as would draw the intestine away from the abdominal wall is inconceivable under the physical laws which control intra-abdominal pressure; and with the intestine in contact with a weak-ened point protrusion is always possible.

Dr. T. S. K. Morton: Several years ago a London surgeon—I think Mr. Morris—wrote quite an elaborate thesis on the subject of the mesentery and its relation to hernia. He apparently demonstrated that in the cases of hernia which he had examined there was distinct lengthening of the mesentery which seemed to be

peculiar to such cases. He found this in the very voung, and he urged that the lengthening of the mesentery had a great deal to do with the occurrence of the hernia. I have seen this statement incorporated in one or two text-books, and it seems remarkable that no one has before this thought of suggesting the operation of doubling the mesentery on itself to prevent the occurrence of hernia. I understand that Dr. Shimwell has done this operation upon animals with satisfactory results.

In this connection the recent suggestion of Mr. Tait in regard to treatment of hernia by abdominal section comes up with special force, If, as Mr. Tait tells us, it is exceedingly easy to draw the hernia back even when tightly strangulated, and if, at the same time, we can shorten the mesentery and cure the hernia, and also deal with any prolapsed omentum, it would be a distinct advance in surgery. The method is not applicable to all cases of hernia. If the operation has any field it is in inguinal, and especially in femoral hernia. Dr. Shimwell has thrown out a very valuable suggestion, and I should hesitate very much to condemn the method until I had heard more about it.

Dr. Shimwell: I did not attempt to apply this method to all hernias I think that any case in which the hernia can be maintained by a truss should not be operated upon. The method was suggested for those cases in which a radical cure was indicated. The method, of course, is applicable only to intestinal hernia. When we find omentum in the sac we do not hesitate to remove it. In peritonitis the omentum is contracted, and is found high up in the peritoneal cavity, and is of no use. The occurrence of congenital hernia is no objection to the method. The difficulty may not be originally in the canal, but the lengthened mesentery may permit the bowel to so press upon the canal as to weaken it. It seems folly to tinker with the canal and not try to remove the cause.

To DISSOLVE COCAINE.—Squibb recommends the use of a half of one per cent. solution of boric acid to dissolve cocaine, this amount being needed to prevent decomposition.—Medical Record.

SELECTED PAPERS.

TUBERCULOSIS IN CATTLE.

TUBERCULIN AS A DIAGNOSTIC AGENT.

There is no aspect of the subject of tuberculosis that is not important. There is probably none more important than the prophylaxis. As the disease is in no small degree transmitted by the milk and flesh of cattle, any means that facilitates its detection in and eradication from the source of food-supplies must command earnest attention. It is on account of the vital importance of the subject that we present herewith a detailed report of the proceedings in connection with the discovery of tuberculosis and the slaughter of some of the cattle of a herd of valuable animals, and the means taken to eradicate the disease. Not an insignificant feature of the investigation is the part played by tuberculin as a diagnostic agent. The movement inaugurated should make a departure in hygienic methods of practice.

HISTORY OF THE HERD.

The Claremont herd of Jersey cattle was established about 1882-'83, and springs from a number of imported cows which were bought at that time. Frequent additions to the herd have been made, from time to time, of animals bought in New York, Baltimore and Canada, and none but the choicest individuals have been selected, for which high prices have been paid.

All of the leading strains of Jersey bulls have been used, and to-day the Alphea, Rioter, Stoke-Pogis, Coomassie, St. Lambert and Guilderoy blood is found represented by many splendid animals.

Every precaution has been taken to preserve the health of the stock and to increase their constitutional vigor. Inbreeding has never been practised, and the stables and animals have always been cared for in the best manner.

If good ventilation, the choicest of food, plenty of exercise and pure water are potent factors in preserving the health of animals, this herd has been supplied with all of the conditions favorable to the most perfect health.

The herd has been regularly examined by experts, and the present outbreak of tuberculosis was discovered but a few weeks ago. In the rare cases in which the disease has heretofore been detected, the affected cattle have been destroyed at once, and their places in the stable disinfected.

By the use of tuberculin the disease was discovered in animals that seemed to be in perfect health, and it was not until this discovery that the heroic measures adopted were decided upon,

Experts hold that tuberculosis prevails to a great extent in many of the large herds of the country, and that it can be eradicated only by promptly killing all suspected animals. All agree that it is better to kill some suspected animals and find them free from tuberculosis, than to allow a single suspected animal to remain in a herd

Mr. Gillingham's action is an example of public-spiritedness that has been seldom equalled, and the public would profit immeasurably if others would follow a similar course. The sacrifice of animals worth thousands of dollars must command the warmest admiration.

Remarks by Dr. Pearson, Assistant Professor of the Theory and Practice of Veterinary Medicine in the University of Pennsylvania.

I was requested by Mr. Joseph E. Gillingham, several weeks ago, to examine a cow in his herd which did not seem to be doing well, and I found it suffering from tuberculosis. The animal was killed the next day, and the diagnosis was confirmed by the post-mortem examination. Thereupon I made a careful physical examination of the entire herd, and found five cows affected with the same disease, all of which were promptly destroyed. A short time after this a fat cow that would not breed was killed for beef, and it was discovered to be in a highly tuberculous condition. This caused me to suspect that the disease might be more prevalent than we here-tofore had reason to suppose, and with the object of detecting the affected animals it was decided to use tuberculin as a diagnostic agent. It is well known that tuberculosis in cattle is exceedingly difficult to diagnosticate, and that there are no physical signs by

means of which we can recognize any but well-advanced stages of the disease. It is for this reason that tuberculin is so valuable as a diagnostic agent. The subcutaneous injection of a small quantity of tuberculin is followed by elevation of the temperature of a tuberculous animal, but not otherwise. These are, at least, the results that have been obtained by numerous foreign investigators, and by the Tuberculosis Commission of the Veterinary Department of the University.

Tuberculin has now been used on hundreds of cattle, and with the most satisfactory results. Of course, nothing is absolutely infallible, and there are a few cases on record in which the characteristic reaction to tuberculin failed to appear. But we must remember, in this connection, that many incompetent persons have experimented with tuberculin, and that of the vast literature of the subject some is untrustworthy.

It has also been said that tuberculin will cause a reaction in animals suffering from chronic inflammatory diseases other than tuberculosis; but it is well to call attention to the fact that tuberculosis frequently occurs in association with other diseases, and that in these cases the rise in temperature may have been due to undiscovered tuberculous lesions. That this may happen is shown by an occurrence in Germany. A cow was given an injection of tuberculin, and reacted characteristically; she was killed and tubercles sought, but none were found. It was thought that the agent had failed, until the animal had been hung up and the vertebral column divided, when well-developed tubercles were found in the bones of the back.

In the few cases in which reactions followed the use of the agent and post-mortem examinations have failed to disclose the existence of tuberculosis, may not similar conditions have been present? In all, seventy-nine of Mr. Gillingham's cattle have been tested with tuberculin, and of these thirty have reacted in a manner that has been interpreted as indicating the existence of tuberculosis.

Of these two have been killed, and were found to be diseased. After discovering how prevalent the disease probably was in the herd, the question of the disposal of the animals became the all-important one. Three courses were open: The animals might have been kept, as they were all apparently in good condition and appeared well, and many were yielding large quantities of milk;

or they might have been sold, for they seemed to be in perfect health, and would undoubtedly have brought good prices; or, lastly, they could be killed, and thus the danger of contamination of the other animals and of the milk be removed. Mr. Gillingham did not, for a moment, consider any but the last method of disposing of the animals. As soon as tuberculosis was discovered, he ordered the affected cows destroyed, and the milk from animals known to have tuberculosis has never been sold or used. The remaining healthy animals will be placed in disinfected stables, frequently examined for incipient tuberculosis, and strictly kept from associating with suspected animals. In this way it is hoped that the progress of the disease will be checked, and the health of the remaining animals preserved.

Remarks by Dr. Guitéras, Professor of Pathology in the University of Pennsylvania.

It is seldom that an opportunity like the present offers for experimentation on so large a scale. Here, indeed, the public spirit of the owner of these animals has vied with the magnitude of the subject. The occasion is, therefore, one that well deserves earnest attention, and it may interest the public to have the problems here involved presented from their several points of view.

The facts are briefly these: A number of animals in a fine herd of cattle is suspected of being tuberculous. In a few of them the diagnosis has been confirmed by post-mortem examination. In others, apparently healthy, the suspicion rests mainly on evidence furnished by the use of tuberculin as a means of diagnosis. As you have heard, it is now proposed to kill the animals.

There are several lessons to be learned from the investigation of to-day.

1. The value of tuberculin as a means of diagnosis will be proven. When a physician pronounces a case to be tuberculous, he is nearly always right, because there is hardly a subject in medicine that has received more careful and successful study than this. Occasionally, however, the physician will find that his suspicions have been unfounded, or, more often still, he will find tuberculosis when it was not suspected. It appears that tuberculin can reduce very considerably the number of such errors. The experiments made in Karlsruhe, Dresden, and Dorpat, and in France, show that the

masked tuberculosis of the lower animals may often be detected by means of tuberculin.

2. Our attention should be called to the example that is to be given to-day of an earnest and grave consideration of a question relating to the public health. Of all medical problems none equals in importance that of tuberculosis—a disease that causes one-seventh of the deaths of the human race. Whenever it can be clearly shown that its progress can be arrested in any direction, no sacrifice is too great if it brings about the desired end. Tuberculous cows are a menace to the public health. The following facts will leave no doubt as to this. The meat of a tuberculous cow contains the microbes of tuberculosis. Even after such meat is cured by salting or smoking, it can by inoculation be successfully used to produce an experimental tuberculosis in some of the lower animals.

Another danger is that of transmission of the disease by means of milk. In many localities it has been found that ten per cent, of the stall-fed cows are tuberculous. Of these, fifty per cent, will yield milk containing the microbes of tuberculosis-milk that can be inoculated into guinea-pigs and produce tuberculosis. Of course, the material thus used by the experimenter is placed under conditions the most favorable for a successful inoculation. In the natural course of events this is far from being the case. On the contrary, innumerable agencies, some of which are unknown, render the process of transmission of the disease much more difficult than it is in the hands of the experimenter. Hence it is that we do not all have tuberculosis. But we stand between this evident source of danger and the frightful mortality that I have mentioned. I will not leave this subject without saying that a temperature of 68° C., kept up for thirty minutes, will destroy all the bacilli of tuberculosis that may be present in milk.

It is not alone in the food-supply that the products of tuberculous cow may be brought to us. Indeed, it is probable that in the majority of instances we take in the tuberculous material by inhalation, and not by swallowing. The tuberculous material taken in by inhalation has more chances of taking root, as it were, than that which is swallowed.

And how is milk inhaled? By drying wherever it may fall, and being blown about with other particles of dust. Guinea pigs can experimentally be made tuberculous by putting some dust under their skins; and if the dust is obtained from rooms in which tuberculous patients are being treated, the chance of a successful inoculation is much greater than that in the case of dust taken from other apartments. The conclusion to be derived from this is, that we should not allow tuberculous patients, human or otherwise, to make tuberculous dust.

3. We shall look forward with great interest for the result obtained by the destruction of these animals. How far will the desired end of eradicating the disease be attained? How far may the young cattle be already tainted? How far may the premises be infected?

It may be possible, by this experiment, to demonstrate how tenaciously the infecting material may adhere and be renewed about premises that have once been infected, or by what means it may be destroyed.

It is by no means easy to demonstrate the success of measures of disinfection of premises against tuberculosis. I would suggest that in carrying out measures of this kind attention should be paid to the removal of all classes of vermin existing about the premises, especially rodent animals, that might be the means of perpetuating the evil. I once saw what appeared to be a successful disinfection of a country house against tuberculosis, and it was signalized by the destruction and driving away for months of mice, bats and insects. In disseminating the germs of disease there can be no doubt of the pernicious activity of these agents.

Remarks by Dr. Shakespeare, lately United States Commissioner to Investigate Cholera in India and Spain.

We learn from the census of 1880 that we possessed in this country about 43,400,000 cattle, 49,000,000 sheep, and 51,000,000 swine. Of these animals it is the common experience that cattle and swine suffer most from tuberculosis. Passing by without remark the ravages of tuberculosis of swine, I shall briefly endeavor to show the importance of the subject as regards the interest of cattle-breeders and dairymen, and point out its relations to the public health.

1st. As to the extent of tuberculosis in cattle.

The statistics concerning the extent of tuberculosis in cattle are exceedingly incomplete, and for some countries entirely wanting;

but it may be safely said that, whatever the figures, they are far short of the real truth.

Taking all cattle of all ages and uses, including calves, a low estimate of the average percentage of those visibly affected with tuberculosis is two per cent. The highest percentage of disease is, by common observation, found to be among the milch-cows, and it ranges in different herds and localities, from three to ten or more times the general average. It will be within truth, therefore, if we say that in 1880 there were in this country 868,000 cattle affected with tuberculosis. Every bovine animal suffering from tuberculosis will ultimately die of the disease if it be not killed. This means a loss to the farmer (placing the value per head at twenty dollars) of \$17,360,000 per annum. In 1880 there were 12,443,000 milch-cows. Estimating the percentage of disease among them at ten, a conservative figure, we find that 1,244,300 were tuberculous. Fixing the value per head at thirty dollars, we learn that the loss, if these animals were not sold in the shambles for beef, is \$37,329,000.

2d. Tuberculosis is highly infectious and contagious among cattle and swine.

It is now universally recognized by competent veterinarians and pathologists that tuberculosis is virulently infectious and contagious among cattle and swine, and it is an established fact that, as a rule, higher-bred and well-cared-for herds suffer most from its ravages. Once started in a herd, unless the most vigorous and judicious means are early enforced for stamping it out, it bodes the slow but certain destruction of the majority, if not, indeed, of the whole. The infectious principle is contained in the material that comes from the diseased parts; that is, in the matter which is coughed up from the lungs, and is either swallowed or thrown off in the act of coughing. The bowels are often ulcerated. The excrement, therefore, contains the discharges from these ulcers, as well as the matter thrown off from the lungs which is swallowed This infectious material has been, unfortunately, found to be highly resistant to the action of the ordinary natural agents of destruction, such as drying, freezing, and the like. The excrement and the matter expectorated, therefore, infects for a long time the stables and other places frequented by the affected animals, becomes dry, powdered, and rises in the dust, to be inhaled and swallowed by healthy companions, that in their turn contract the disease, and themselves form new centers of infection. It seems to be pretty clear, also, that sometimes, in cattle, the disease is transmitted to the offspring from a tuberculous bull, who may be suffering from a concealed tuberculosis of the genital apparatus.

3d. Absolute necessity for the enforcement of vigorous measures to eradicate the plague, and economy alone in their prompt and unstinted adoption.

Experience has proved the utter uselessness of temporizing by trusting to quarantine of visibly affected animals and disinfection of stables, etc. The only measure that promises any degree of certainty to arrest and prevent further ravages in a herd, is the prompt destruction of not only all visibly affected animals, but also of all suspected animals, accompanied by as thorough a disinfection of the surroundings as is known to modern science. Mr. Gillingham has, in my opinion, in deciding to follow the course recommended, done well from the standpoint of advanced public spirit. But he has adopted a course which in the end-notwithstanding its great first cost—will most benefit his own pecket. It is unquestionably the economical course.

4th. The constant danger to the public health from tuberculous cattle.

I have now reached the most important part of this question for the general public.

Tuberculosis in the human being is possibly more prevalent than among cattle. It is estimated by reliable mortality statisticians that from one-fifth to one-seventh of all deaths are due to some form of tuberculosis. The disease is now recognized to be less hereditary in the human being than it is infectious. There is no fact better established in medicine to-day than that the human being who has no hereditary tendency whatever to tuberculosis can acquire the disease by taking into the system the infectious principle of the disease. One of the most frequent modes of infection in man is by inhalation—But it is also certain that in the laboratory the disease can be easily produced artificially in animals experimented on by way of the digestive canal.

There is ample evidence that a large percentage of tuberculous milch-cows produce milk that contains the infectious principle of the disease. The use of such milk for infants' food without boiling constitutes an undoubted danger that they may become infected. In fact, since tuberculosis in the human race has become better known it has been found that in infants and young children in some large cities the mortality from some form of tuberculosis is far greater than has been generally believed, amounting in some localities to one-fifth of the deaths in the young. The significant fact in this connection is that it is most frequently some part of the digestive passages that become first affected. In conclusion, I wish to say that the experience of Mr. Gillingham is by no means single or at all uncommon. It is, however, uncommon for one in his stuation to adopt so wise a course. I wish to enforce his experience as one more of the numerous examples of the necessity for the general public in large cities to see to it that there is proper inspection of their meat and milk supplies.

Remarks of Dr. A. C. Abbott, First Assistant in the Laboratory of Hygiene, University of Pennsylvania.

Prior to the introduction of tuberculin by Koch, bacteriological studies were directed more to checking the spread of infectious diseases by means of vaccination with either modified organisms or their nutritive products than to the therapeutic employment of these substances in the treatment of disease already in progress.

The method employed by Pasteur for the treatment of rabies, which, in many respects, appears to be analogous to the method of Koch, though certain essential points are lacking to permit our making the positive statement, was the only therapeutic employment of what seem to be the products of growth of bacteria, or modifications of the substances composing the bacteria themselves. I say, seem to be, for we are not yet in a position to say that bacteria are the agents underlying the condition known as rabies.

Until the introduction of tuberculin the method in vogue for preventing the spread of infectious diseases was, in the main, that of causing a mild or modified form of a disease by inoculating the animal with the organisms concerned in its production after their virulent character had been so altered by chemical or thermal agents that they no longer possessed the power of producing the malady in its normal intensity. This modified attack often afforded immunity against a subsequent attack of the same disease.

Another common method aimed at causing certain indefinite

reactionary changes in the tissues by the introduction into the animal of the chemical products of bacterial growth from which the organisms that had produced them had been carefully separated by filtration.

In both of these methods the application of high temperatures, particularly in the latter, was fatal to the success of the experiment, for the virtues of the immunity-affording substance that existed in the chemical products of these special bacteria, that had been studied in this direction, were entirely destroyed by these temperatures.

It is plain, therefore, that, unless the separation of the living and virulent organisms from the chemical products that were employed as a vaccine was perfect, it was quite possible to cause the appearance of fresh cases through these inoculations instead of checking the spread of the disease.

By the method employed in the preparation of tuberculin such an accident is not possible, for since its virtues are not destroyed by the action of heat of sufficiently high temperature to kill all living bacteria that might have been concerned in its production, this exposure to high temperature forms a regular step in the routine of its manufacture—a step intended to render the material harmless.

Whether we are justified in saying that the active principle of this substance, tuberculin, is the product of growth of the bacilli, or the bacterio-protein of the bacilli themselves, it is not at present possible to say with certainty, as in its manufacture both substances are to a degree spared. It seems reasonable, however, to consider the systemic reactions that appear in tuberculous animals after inoculation with this agent as due, in all probability, to the combined action of both substances.

As we are now aware, tuberculin is the concentrated fluid medium in which the tubercle bacilli have been growing. Its preparation, in short, is as follows: Tubercle bacilli are cultivated preferably upon fluid media to which 6 to 7 per cent. of glycerin has been added. When the culture has reached the maximum of its growth it is subjected to a degree of heat sufficient to destroy all living bacilli. It is then carefully filtered through unglazed porcelain, and the filtrate is evaporated over the steam- or water-bath to the proper degree of consistency.

The statement that tubercle-bacilli have been found in tuberculin, not only in that supplied by Koch, but also in samples from other sources, is perfectly true; but the impression that this statement, stopping where it does, is likely to make upon the minds of those unacquainted with the method of preparing this agent, is by no means in accord with the true state of affairs. The method of preparation of tuberculin, as we have seen, insures the death of all living tubercle-bacilli from which it is extracted by subjecting them during the process to a degree of heat for a length of time quite sufficient to render them inert, in so far as their power to produce tuberculosis is concerned. For this reason it is by no means essential to the safe employment of tuberculin as a diagnostic agent that the fluid be deprived of all these dead and inactive organisms. The only undesirable results that might, and, indeed, would, be very apt to occur, are purely local results-results finding expression in slight suppurative processes at the point in the tissues at which the dead bacilli accidentally present in the tuberculin are deposited. Koch, Prudden and Hodenpyl, Weil, Maffucci, Wissowicz, and others, in their published accounts of experiments with this agent, all call attention to the local suppurations that sometimes occur at the point of inoculation, due, most likely, to the pus-producing properties of the proteid substances compcsing the bodies of the dead bacteria themselves—a process, however, that is in no way connected with general tuberculosis, and is of itself not of a dangerous nature.

As to the danger of using the milk of cattle that have been inoculated with tuberculin as a means of diagnosticating tuberculoss which is so slightly advanced as not to be recognized by any other means, I think there can be but little fear, and still less from its employment in non-tuberculous animals. This, however, is not the case with the milk of cattle in which the disease is more or less advanced, as has been pointed out by a number of observers, particularly Bang, Tschucca and Ernst. In these cases there is not only danger in the immediate use of the milk, but, by keeping, this danger is increased, because, as has been observed, the bacilli not only retain their life properties, but actively increase and multiply in the milk in which they are located, retaining all the while their disease-producing peculiarities. In a series of experiments performed by me, and published two years ago in the Johns Hopkins

Hospital Bulletin, I showed clearly that milk, as it comes from the shops, is an excellent medium upon which to cultivate these organisms. From our present knowledge on this subject, there is doubtless a greater amount of infection through this agent than is ordinarily supposed, particularly in the case of children, who depend so largely upon milk as an article of food. Indeed, several cases of apparently direct infection from the use of milk of tuberculous cattle as food for infants have been published. Where no rigorous control of dairies supplying milk to the market exists, the only safeguard possessed by the public against possible infection through this medium is the protection afforded by sterilization of the milk employed, either by boiling or through the employment of steam-sterilizers.

In regard to butter and cheese, it has been shown by investigations conducted at the Imperial Health Bureau, of Berlin, that tubercle-bacilli may and do retain their vitality in these substances frequently for weeks.

ARRESTED TUBERCULOSIS.

This subject received a large share of discussion in the section of Pathology at the last meeting of the British Medical Association. Dr. J. K. Fowler read an exhaustive and exceedingly interesting paper, which appeared in the British Medical Journal for October 31, 1891, and which was based on the post-mortem records of Middlesex Hospital during the eight years, 1879-1886. In that time, 1943 necropsies were performed, and in 177 cases (9.1 p. c.) obsolete tubercle of the lungs was discovered. Of these 177 cases, the majority (110) occurred in males, 67 only having been present in females. The right lung had been the seat of the trouble in 35 cases, the left lung in 36 cases, and both lungs in 106 cases. As a parallel to his own observations, Dr. Fowler quoted the tables of the Vienna Institute of Pathological Anatomy during the period 1869-1879. Out of 16,562 necropsies, obsolete tubercle of the lungs was found 789 times, or in 4.7 per cent. of cases; 509 cases had occurred in males, 280 in females. The right lung only was affected in 69 cases, the left in 65 cases, and both in 655 cases.

These statistics are of much interest, and, although they take us back to days before diagnosis could be confirmed by the discovery of the tubercle bacillus, yet they are the compilations of thoroughly competent observers, and must be afforded due consideration. Several points at once attract notice. The preponderance of the male sex in both instances is very marked, but before concluding that arrest of the tuberculous process is really more common in the male than in the female, we must await further investigation, with more complete data. A surprising feature is that healing occurred much more frequently when both lungs had been affected than when the disease had involved one lung singly. Generally in these instances the apices were alone diseased, but quite frequently the lower lobes were included in the process, so that involvement of these lower lobes must not be regarded as incompatible with arrest of the disease.

With reference to the stage to which the morbid process had advanced before arrest obtained, in 43 out of Dr. Fowler's 177 cases a cavity was present. In the majority of cases the lesion was fibrous or caseous. The cause of death in the cases showing healed tubercle was most frequently cancer. The association of cancer with tubercle is very frequent, although both processes are rarely active at the same time. Next in frequency to cancer, as the cause of death, come respiratory affections, including fresh attacks of tuberculosis. A return of the tubercular disease may be the result of reinfection from without, or of an exacerbation and extension of a process which has for a longer or shorter period remained latent and cut off from the surrounding structures by a pregnable wall of fibrous tissue. At times the arrest in the lung is followed by the appearance of the disease elsewhere, as in the larynx, where, though not offering an immediately unfavorable prognosis, it is constantly liable to reinfect the lung.

The appearances presented by the cured lesions are variable, but generally sufficiently characteristic. Fibrosed pigmented tubercles; fibroid induration with puckering and scarring of the apex, and with or without obvious tubercles; areas of caseation surrounded by fibrous capsules; cretified masses similarly surrounded, and cavities of varying sizes, with smooth thinner or thicker walls of fibrous tissue, are to be included among the more common manifestations of arrested tubercular disease. In these relics of a formerly

active process it is not infrequently possible to demonstrate the existence of tubercle bacilli, cut off from opportunity of carrying on their toxic function by a more or less secure fibrous wall Various deformations of the respiratory tissues may be present, evidencing in some degree the amount of actual destruction which had obtained before the arrest of the disease. Commonest among these changes are classed scarring and puckering of the pleura, pleural adhesions, dilatation of bronchi, compensatory enlargement of other parts of the same lung or of the opposite lung, etc., etc.

Dr. Sydney Martin also contributed a paper on this subject at the meeting of the British Medical Association. For practical purposes he considers that retrograde tubercle of the lungs may be looked upon as occurring in two forms, "calcareo-caseous tubercle," and "fibroid and pigmented tubercle." Out of 445 consecutive autopsies, the calcareo-caseous form was observed in 31 instances, and the fibroid pigmented form in 11 instances, making in all 42 cases of retrograde tubercle, or 9.4 p. c. In his cases, too, malignant diseases and respiratory diseases had been the most frequent causes of death. According to Dr. Martin "retrograde tubercle must be viewed as a tuberculous infection which has at one time invaded the body, and for some reason undetermined has remained local, becoming encapsulated with fibrous tissue after the nodule has undergone caseous and calcareous degeneration, or becoming transformed into fibrous tissue before caseation occurs."

Other information on this subject has been furnished by Dr. Joseph Coats (Brit. Med. Jour., October 31, 1891). After careful scrutiny of bodies examined post-mortem, he concludes that about 23 per cont. of persons dying of non-tubercular affections have had some form of internal tuberculosis at one period or another during life. He puts the percentage of deaths in which tubercle (in all its forms) is an active process—though not necessarily directly causative of death—at twenty-two. He therefore makes the somewhat startling statement that "about half of all persons born into the world are at some period of their lives affected with tuberculosis." In illustration of this subject, when addressing the Glasgow Medico-Chirurgical Society, Dr. Coats exhibited a lung in which practically all trace of lung disease had disappeared, leaving simply a congeries of cavities. The process here had been distinctly tuber-cular, yet healing had obtained after all the lung tissue had been

destroyed and excavated, and a wall of wholesome fibrous membrane lined the cavities which had been produced. The opposite lung in the same case showed evidence of a less advanced tuberculosis which had been arrested.

As illustrative of the process involved in the spontaneous healing of tuberculous disease, Coats considers the most frequent forms as being typed in the cases of (1) the lymphatic glands in the neck, and (2) the mesenteric glands. In the former, an irritant induces the aggregation of inflammatory products and true, typical tubercles, and these undergo caseous necrosis. The caseous mass may remain unaltered, but generally some irritation from outside sources suffices to induce suppuration in the immediately adjacent tissues, the caseous matter softens, an abscess forms and the dead matter and pus are discharged. If the infective virus is completely cleared out, healing obtains. In the mesenteric glands, however, the process rarely goes on to suppuration, as the parts are protected from irritation. Here, instead of softening, a deposit of calcareous matter obtains, and the whole gland becomes converted into a hard, chalky mass. This is the form most frequently met with in the case of healed lung tuberculosis, though the first type obtained in the lung of the case just cited.

Dr. Henry P. Loomis (Med. Record, New York, January 9, 1892) adds to our literature another important contribution on this same subject. Out of 763 persons dying of a non-tubercular disease, 71, or over 9 per cent., presented in their lungs changes which he regards as characteristic of healed pulmonary tuberculosis. Almost every stage of the disease could be illustrated by these cases. Dr. Loomis does not think that the phthisis can be said to be absolutely cured unless it is possible to prove the absence of tubercle bacilli. Even a few bacilli remaining in an apparently healed area in the lung, must of necessity always be a source of danger to the individual. Inoculation experiments may prove the persistence of bacilli even after the ordinary tests have failed to reveal their presence.

The results of these investigations are encouraging from every point of view, especially when we consider that hospital statistics are compiled from cases which are most unfavorable as regards the application of hygiene, dietetics and general care. They show, first of all, that tubercle is not a necessarily fatal disease—in fact,

that most cases offer a reasonable hope for cure. They furthermore direct our attention to nature's method of overcoming the disease, and give us an inkling as to the best course we can pursue in aid of the vis medicatrix. The distinct trend of the medical investigation of to-day is towards finding nature's cure. We have practically abandoned hoping to cure tubercle by killing the microbe with antiseptics or tuberculin, and are now endeavoring to discover the true significance of Immunity. When we have accumulated and formulated knowledge on this secret of nature, we cannot have failed to make a marked step forward.

Being thus encouraged, it behooves us all the more to be constantly on the watch for the earliest manifestations of tubercular disease. Careful and methodic examination of the chest should become almost a matter of routine, and the microscopical search of sputum for bacilli applied to all cases in which an element of doubt exists. The less advanced the process before diagnosis is made, the more confident we may be of the successful application of remedies. Always bearing in memory the liability of a localized disease to become disseminated, it is a matter all-important to neglect no local manifestation of tuberculosis which it may be possible to treat therapeutically or otherwise. This is especially important in instances of tubercular disease of the upper respiratory passages.—

Maritime Medical News.—Abstract by Dr. Hattie Nova Scotia Hospital for Insane.

THE TREATMENT OF INFLAMMATION IN THE RIGHT ILIAC FOSSA FROM A SURGICAL STAND-OINT.

By JOHN B. DEAVER, M.D., Assistant Professor of Applied Anatomy in the University of Pennsylvania, Professor of Surgery in the Philadelphia Polyclinic.

(Read before the John Ashhurst, Jr., Surgical Society, University of Pennsylvania)

Inflammation in the right iliac fossa, which is the subject I have selected at present to discus, is one which latterly has been written upon very extensively, and a large number of cases operated upon,

both successfully and unsuccessfully, have been reported. The varieties of inflammation in this fossa are, first, inflammation of the connective tissue in the immediate neighborhood of the head of the large bowell; second, the inflammation of the serous covering of the head of the large bowel (cæcum); and third, inflammation of the vermiform appendix. They are technically known by the terms typhlitis, perityphlitis and appendicitis In the majority of cases the inflammation attacks primarily the vermiform appendix. and the tumor or mass consequent upon this inflammation gives rise to the physical condition we detect in the greater number of cases sooner or later. I believe that we meet with cases of both typhlitis and perityphlitis, having had opportunities to verify this on the operating-table. I have divided inflammation in this region into threee varieties, and you will naturally expect to hear me give you the points of differential diagnosis between them. This I am not able to do, and, from a practical standpoint, I believe there are but few instances where it can be done; therefore most of these cases call for treatment upon general surgical principles. Were I to attempt to differentiate I would simply confine myself to the points of difference between perityphlitis and appendicitis, as the signs and symptoms of both appendicitis and typhlitis are so nearly similar that, to my judgment, it is mere guess work attempting to arrive at a differential diagnosis between the two. The points in the history of a case which would lead me to think the trouble was perityphlitis would be, if idiopathic, the history of slow onset with constipation; if tranmatic, the history of an injury. In favor of perityphlitis there are tenderness and swelling, more in the neighborhood of the crest of the ilium and of the loin. Here, too, in the latter class of cases, percussion gives a flat note; whereas in appendiceal troubles, if flatness is detected at all at this point, it is not until the trouble is far advanced. In the greater number of appendiceal inflammations the onset is very sudden, likely to follow a heavy meal. The patient is attacked early with pain, which he locates chiefly at the umbilious. This is followed by nausea and later by vomiting, which, if the case does not yield to active treatment, it becomes impossible to arrest. The bowels are constipated; vet I have seen in the early stages of some cases two or three evacuations, which were evidently from the lower bowel.

If the inflammation is of a high grade it is but a short time until

distention is developed, first confined to the point of trouble and later becoming general. At first there is general tenderness in the right iliac region, which, in my experience, is not concentrated at any one point in the fossa, as has been described by McBurney. Palpation, too, detects very decided resistance offered by the abdominal muscles of the affected side; the latter I regard as an important sign to be considered in the diagnosis. Later on, in many cases, an indurated mass is detected, which in some instances is circumscribed, while in others it becomes rapidly diffused, particularly in the line of the linea alba and of the pelvis. Deep rectal examination I do not regard of much diagnostic importance, at least early in the case. But in those cases where the trouble tends to become rapidly diffused, especially if in the direction of the pelvis, where the appendix is situated, if holding its third position, I regard it of extreme value. As a matter of routine, I make this examination always. To determine the presence of pus, early, by physical examination, is often impossible, granting, of course, that the usual signs of its presence are absent, namely, edema of the overlying abdominal walls, fluctuation either by palpation through the abdominal walls, or with the finger in the rectum, the absence of rigors or a decided chill, and sweats. Doubtless you will infer that it is difficult to say when the case demands operation. This is governed by the result obtained by well-directed medical means, also by the local and general condition of the patient. If the recently accepted treatment, mild purgation with salines, and the very moderate use of opium, fail to render the patient comfortable, to allay the vomiting, to prevent distention, to produce liquid evacuations, the temperature remaining high or tending to rise gradually, and the local trouble all the while growing more pronounced with increase of tenderness and increase of induration, I at once and unhesitatingly advise operation. Constant retching, increasing abdominal distention, and obstinate constipation, are three conditions, which, if associated, warrant immediate interference.

There are already a sufficient number of fatal cases on record, where the trevatment of opium alone, in gradually increasing doses, has been adopted, in preference to operation, to disabuse the minds of both physicians and surgeons of its fallacy.

After refusing to operate on many cases brought into the hospitals in approaching collapse, with the diagnosis of peritonitis con-

sequent upon obstruction of the bowels, with hugely distended abdomens, patients retching incessantly, the bowels not having been moved for four or five days, and death following in from eight to twelve hours, and the autopsies revealing the abdominal cavities flooded with pus, the vermiform appendices perforated if not gangrenous, the coils of intestines greatly distended and matted together by layers of fibrinous lymph, I cannot conscientiously form any opinion other than that the diagnosis was improperly made, or that the attending medical man did not believe in opera tive treatment, or deferred calling in a surgeon until the golden opportunity was a thing of the past. Under circumstances like the above, the argument, why not operate if the patient is sure to die anyway, is often brought forward. My answer is, that it often requires better judgment to decide when not to than when to operate. I am willing, always, to take desperate chances if there is the slightest indication of the patient being benefited, but certainly not otherwise; and to you, young men, I would say, be progressive, but not too aggressive.

I could cite a number of cases, giving their history and treatment, but I feel that it suffices simply to give you the conditions calling for active interference. I wish you also to understand that where the symptoms and local conditions are relieved by the treatment I have recommended, surgical interference should certainly

not be considered.

But recently I have operated on a case of perityphlitis referred to me by my friend, Dr. Charles Styer. In this case the pus having formed in the immediate neighborhood of the cocum gravitated to the loin, causing odema of the overlying abdominal walls and giving fluctuation. I opened up the loin, evacuating a considerable quantity of focal-smelling pus. As the pain and tenderness of which the patient complained were referred to the cocum, and not withstanding the fact that physical examination of this region through the abdominal walls and per rectum to reveal the presence of any swelling, I exposed the vermiform appendix and cocum by cutting through the right linea semilunaris, this demonstrating very clearly that neither the cocum nor the appendix was involved in this trouble. This case, as well as many others I have operated upon, demonstrates beyond question of doubt, to my mind, at least, that we meet with bona-fide cases of perityphlitis. This being so,

is it not folly to argue that every case of inflammation in the right iliac fossa arising in connection with the bowel going on to pus formation should be subjected to a laparotomy? I cannot but feel that the operation as I describe it is the safest procedure when dealing with trouble in this region.

The technique of the operation for the relief of inflammation of the right iliac fossa consists in exposing first the transversalis fascia, and the subperitoneal fat, in the line of the right linea semilunaris, by a vertical incision, four to six inches in length, the centre of which corresponds to the point where a line, drawn from the anterior superior spine of the ilium to the umbilicus, intersects the semilunar line. The transversalis fascia and the subperitoneal fat having been exposed, if the inflammation is perityphlitic and pus be present, it is readily evacuated, while, at the same time, if the surgeon prefers it, a counter-opening may be made well back in the flank through which a drainage-tube can be introduced, and the cavity thus drained to the best possible advantage, or the operation may be terminated after the manner of Parker. If the mass be intraperitoneal, the overlying peritoneum is taken up between a pair of hemostatic forceps and incised, when, if an abscess exists, it is evacuated. The abscess having been evacuated and thoroughly washed out, the appendix is sought for, care being taken not to break through the lining wall of the abscess cavity, granting that it is shut off by such from the general peritoneal cavity. Under the latter circumstances, if the appendix is not to be seen, I at once complete the operation by introducing a glass and a rubber drainage-tube to the bottom of the cavity, around which I pack iodoform gauze, after which it can be irrigated twice daily with Tiersch's solution, which, when thrown in through the rubber drainage-tube, will escape through the glass tube, and vice versa.

The case progressing favorably, the gauze need not be removed for two or three days. When suppuration is decidedly diminished, the tabes are removed, the cavity washed out and packed with gauze, and in this way healing, which takes place by granulation, is promoted. When the general peritoneal cavity is involved, I make further search for the appendix if it is not seen at the bottom of the wound, bearing in mind its three relations, the most common of which is where it lies behind the terminal part of the mesentery, pointing in the direction of the spleen. The second most common

position for the appendix is where it lies directly behind the ascending colon; and the third, where it laps down into the pelvis. To ascertain whether it occupies the first position, it will be necessary to lift up the cæcum and the ilium at its termination with the junction of the cæcum and the ascending colon, when the retro-mesenteric space will be exposed. When it occupies the second position, it will be necessary to lift up the cæcum and probably the commencement of the ascending colon as well; this may necessitate dividing the external layer of the ascending meso-colon, which is selected in preference to the internal layer, as in connection with the latter are the bloodvessels which supply this portion of the gut. If it holds the third position it is very readily exposed, when it is not uncommon in the female to find it attached to the right uterine appendage. The appendix having been exposed, it is tied off close to the excum and cut away to the distal side of the ligature. It has been suggested to invaginate the stump of the appendix into the cæcum, and stitch over it the serous covering of the lattere This procedure I have never had occasion to adopt. In the event of the appendix being ulcerated off at its junction with the cæcum, thus leaving a communication with the latter, if the margin of the opening is not infiltrated to too great an extent to warrant the removal of the diseased part of the bowel, I close it with two or more Lembert's sutures. When the excum, by the separation of the appendix, is thus perforated, and its coats very much diseased, I believe it better practice not to attempt to close the opening, but simply to thoroughly drain the wound. My experience has been that the majority of fæcal fistulas of this character close spontaneously, and, where they do not, subsequent operation can be resorted to. I recall one case of fæcal fistula consequent upon suppuration of the appendix, where the abscess, which was believed to have been perinephritic in origin, was opened through the loin, it having distended that space, in which, the day following the operation, the appendix came away through the wound in the loin, as did also the contents of the bowels. The fæcal evacuations continued to go through this opening for some days, but it ultimately healed without operative interference, the child making a complete recovery. The point to be borne in mind in cases of this character is the establishment of free drainage, thus preventing the passage of fæcal matter into the peritoneal cavity. The probabilities are

that in these cases the peritoneal cavity has been shut off from the perforated bowel by inflammatory exudate. This is why recovery so often takes place under such circumstances.

From what I have said regarding the operative technique, you must infer that I disapprove of meddlesome interference, by which I mean, making a prolonged search for the appendix when it is not readily found. I have seen patients practically disembowelled in searching for the appendix, and then it was not found. You probably know enough for the surgery of the abdominal cavity already to have learned that prolonged exposure of the bowels removed from the cavity is attended by profound shock, therefore to be avoided whenever possible. The success of abdominal operations in general depends upon their being done with as much rapidity as possible, granting, of course, that great care is taken in every step of the operation. In work of this character I also disapprove of the introduction of the hand into the cavity, believing that two fingers, the index and the middle, with, in some instances, the assistance of one or two fingers of the opposite hand, are sufficient to accomplish all necessary manipulation. You have seen a sufficient number of cases of laparotomy for the removal of diseased uterine appendages, particularly cases of pyosalyinx, to know that the skilful surgeon accomplishes the removal with but two fingers: this holds good in cases of the character constituting the subject of my remarks.

The after-treatment is very simple, calling for occasional doses of salines to keep the bowels moving regularly once or twice daily, and, if the patient suffers much, a small amount of opium to relieve pain. I do not believe in the exclusive use of salines both before and after operation, but, on the contrary, I give a small amount of opium, being governed, of course, by the amount of pain.

On the other hand, I very much disapprove of giving enough opium to mask the symptoms of the disease. Opium, as is the case with other medicines, must be given with judgment and discretion. Opium has held very much the same relation to abdominal troubles in the past as has bloodletting in the acute sthenic inflammatory troubles. They are both still useful when properly administered. Whereas I appreciate that opium, when not administered very autiously in these cases, is harmful, yet I do believe that restlessness and sleeplessness will be more hurtful to the patient than a

judicious dose or two of opium. On the other hand, active purgation, by means of drastic cathartics, I equally disapprove of, as I feel that the excessive peristalsis which is certainly brought about by these agents is equally competent to aggravate the local condition.

You will note that I have said nothing about suture of the abdominal wound. This I do not approve of, with the exception of the introduction of one or two at the end of the wound—in other words, I rely upon healing by granulation. The question would naturally arise in your mind—Is not the patient rendered more liable by such treatment of the wound to ventral hernia? I can answer this in the negative.

I adopt the same measures here as I do in the treatment of the wound made for the radical cure of hernia—namely, pack it. I have never had a case of ventral hernia following this plan of treatment.

In my earliest operations for the removal of the appendix, where I closed the wound with sutures, I made a counter-opening in the loins immediately above the crest of the ilium and introduced thorough drainage. With my present manner of dressing I do not consider this necessary.—University Medical Magazine.

Transplanting Teeth.—In a re-perusal of Watson's Annals, I find the following, vol. i, page 179, which sounds oddly enough to readers of the present generation: "I have seen a printed advertisement of 1784, wherein Dr. Le Mayeur, dentist, proposes to transplant teeth; stating that he has successfully transplanted 123 in six months. At the same time he offers two guineas for every tooth which may be offered to him by 'persons disposed to sell their front teeth or any of them.' * * * They were, in such cases, two months before they could eat with them. Tooth-brushe-were not even known, and the genteelest then were content to rub the teeth with a chalk rag or with snuff; some even deemed it an effeminacy in men to be seen cleaning their teeth at all "—Elwood Roberts, in Notes and Queries.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., GEO. GILLETT THOMAS, M. D., " Editors.

The Country, and especially from the medical profession of The Carolinas. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the Journal, by sending the address to this Office. Irompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and accept ability. All remittances must be made payable to Thomas F. Wood, M.D., P. O. Drawer 791, Wilmington, N. C.

THE WILMINGTON MEETING OF THE MEDICAL SOCIETY OF NORTH CAROLINA.

For the first time in twelve years the Medical Society will meet in Wilmington. A hearty welcome awaits them! May is the month of meetings and conventions and commencements, but loyalty to one of these is all that a person can accomplish in justice to his profession. The Medical Society of North Carolina must hold the chief place in the minds of every progessive physician. Her demands upon the time and talents of her members must be paramount. For the profession of the State must remember that now we, in our capacity as a Society, are a part of the executive machinery of the State. From our body proceed the Board of Medical Examiners and the State Board of Health. There will be an election for two, if not three, members of the Board of Examiners; there will be a large number of candidates to be examined for license to practice medicine, and other business of importance. A large meeting is expected and provided for, and we trust that the contributions of scientific material will be better than ever before.

The programme is being prepared and will be issued within a few days. In the meantime let all members keep in mind that the day of meeting is changed to the 17th MAY, instead of the 24th, as at first announced.

The hotels will make a liberal reduction of their rates, and the railroads have made the usual concessions in reduced fare.

So far, the Committee of Arrangements have not been informed about the titles of papers to be read, and the programme to be issued can only be provisional.

The election of the President by ballot will be one of the new features in this meeting. It cannot be said that at the Asheville meeting there was an election. The candidates were chosen by acclamation, a practice which is far more to be feared in its results than the private action of a nominating committee. The will of the majority may not be reached in this way, for it may be that the one very popular candidate in going into office with a rush may open the way, in such a time of enthusiasm, to the selection of less desirable candidates. Now the law of the Society requires an election, let us have it, and test the experiment faithfully.

We trust, also, that the Committee on Credentials will see that applications for membership are properly authenticated—a very small blunder in their duties may lead to trouble it would take a long time to overcome.

"CORONERS: MEDICAL AND LEGAL."

In England the discussion is going on and has been renewed from time to time, whether the members of the legal or the medical profession are best qualified to fill the office of coroner. We get all these suggestions from the British Medical Journal (March 26th, 1892), and we quote from the columns of that journal the resolutions of the Liverpool Medical Institution as follows:

"Concerning the nature of the coroner's duties, this meeting is of the opinion that they can be more efficiently performed by a medical man who has thoroughly acquainted himself with the legal bearings of medical questions than by any gentleman who has not had the advantage of medical training."

The editorial from which we have quoted the above also gives the following, which is as applicable to this country as to England:

"One very important duty rests with the coroners and should not be lost sight of—namely, that of deciding in the first instance whether an inquest should be held or not. Here, even more than in the procedure of the court, is discovered the relative value of medical as compared with legal knowledge, for the practically irrevocable decision has to be made on the coroner's own discretion, and in the vast majority of cases that decision is founded on his own special knowledge of disease and the causation of death. It is no answer in such cases to urge that the lawyer can command medical evidence, because no medical opinion can be claimed except on the issue of the regular summons to the medical witness, and this can only be done when an inquest is to be held."

In Massachusetts the State is divided into districts, three medical examiners are appointed for each, whose duty it is to enquire into the causes of death in cases which, in other States, fall under the cognizance of the coroner. These examiners make a complete investigation of the bodies of murdered persons and all other enquiries as to the causes of death while they are fresh, thus giving the State the very best initial proceedings for the detection of crime. In that State it is not a question of the fitness of lawyers as compared with physicians to act as coroners, that State having the wisdom to try the experiment of substituting the effete coroner's jury for a best system. That system is passing successfully the experimental stage.

How is it in North Carolina? Bad enough. In Wilmington, the largest town in the State, the coroner is elected by the people. The choice has fallen for years upon a mulatto man, a barber or barber's apprentice, whose one fitness for the office is the respect he pays to the advice of educated white persons, and another merit

being that he at times uses the prerogative of his office and decides that the county should not be put to the expense of an examination. So that at the very threshold of criminal proceedings faulty administration begins.

Our neighboring town of Goldsborough has had a medical coroner, carrying out the mode of action suggested by the Medical Society years ago. We would like to renew the suggestion that, at the approaching election in the fall, medical candidates for the office of coroner be offered in all the counties. Justice would be subserved if educated physicians filled the offices of coroner throughout the State.

MEDICAL PROVERBS.

(German.)

A physician is an angel when employed, but a devil when you must pay him.

Dear physic always does good.

A disobedient patient makes an unfeeling physician.

(Spanish.)

What cures Sancho makes Martha sick.

The earth hides as it takes The physician's mistakes.

He that sits with his back to a draft, sits with his face to a coffin. Of the malady a man fears, he dies.

He that would be healthy must wear his winter clothes in summer.

(English.)

Diseases are a tax upon our pleasures.

A good surgeon must have an eagle's eye, a lion's heart and a lady's hand.

Tender surgeons make foul wounds.

(French.)

A physician is a man who pours drugs, of which he knows little, into a body of which he knows less.

REVIEWS AND BOOK NOTICES.

A System of Practical Therapeutics. Edited by Hobart Amory Hare, M.D., assisted by W. Chrystie, M.D. Vol. II. Philadelphia: Lea Brothers & Co., 1892.

This, the second volume of the American System of Therapeutics, discusses Syphilis, Fevers, Diseases of the Respiratory System, Diseases of the Circulatory System and Hæmatopætic System, and Diseases of the Digestive System.

We commend at once, especially what Dr. R. W. Taylor has to say about the therapeutics of syphilis. To physicians living in communities where the druggists do not monopolize the treatment, especially of the primary stage, as is so frequently the custom in some of the towns in our State, to young physicians who are next in order, favorites of syphilitic patients, do not fail to read what is so carefully written in the article referred to. The intermittent treatment of syphilis, as set forth by Fournier, is emphatically and graphically repeated for the instruction of those who are not familiar with the writings of Fournier. He concludes his article on the intermittent treatment with these words: "My observation from year to year has thoroughly convinced me that the current emasculated, theoretical systems of treating syphilis are dire failures and bring very many patients to discomfort, suffering, disaster, invalidism and death. While some may get through by reason of some lucky chance, I feel very certain (and I make this statement after due thought and observation) that a man in the long run will have a better chance to be cured of his syphilis by the old-time vigorous six-months' treatment of mercury and three-months of iodide of potassium (after Ricord) than he will by the long-spunout, attenuated courses which have as a watchword the phrase pregnant with ignorance and complaisant indifference, that time and mercury will wear out syphilis." P. 49. If this restatement of an old principle in practice be accepted many physicians will have to take a back track. But we must not be tempted to step aside for striking passages in the various articles contained in this stout volume. The next article, on Scarlet Fever, by the wellknown author, Dr. J. Lewis Smith, needs no comment. We quote

a few pithy lines about the use of antipyretics in the disease. He says: "Notwithstanding these adverse opinions there is sufficient evidence that two antipyretic drugs are useful in certain cases, so that they may be confidently recommended to the profession. These medicines are aconite and phenacetin. . . . In cases of marked depression phenacetin should be prescribed, in small doses, and carefully watched." P. 198.

There are doctors—some among our readers—who have been practising medicine twenty years, but who have never seen a case of small-pox; but at the rate vaccination is being neglected by them it is sure they will have an opportunity before many years of personal observations, and when they do they can turn to Dr. Welch's article on small-pox with comfort for the instruction it contains. The author for long years has had charge of the Philadelphia Small-pox Hospital, and writes from the fullness of such an experience both as to small-pox and vaccination.

The Republic of Mexico seems nearer to us when we note that the article on Typhus Fever is by Manuel Dominguez, M.D., Professor of Therapeutics in the Medical School of the City of Mexico.

The physician practising in a malarial district would look with interest to the article on Malarial Diseases (by George Dock, M.D.), to ascertain his orthodoxy as to the use of quinine, and the volume would be estimated in accordance; we think our readers will be willing to admit his mastery of the subject without agreeing entirely. He says, for one thing: "The modern explanation of the antimalarial action of quinine is substantially that advanced by Binz more than twenty years ago; that is, that it depends on a poisonous influence over the protoplasm of the organisms which cause the disease; in a word, that it is antiparasitic."

Dr. Jerome Cochrane, of Montgomery, Ala., the distinguished Secretary of the State Board of Health of that State, writes of the therapeutics of Yellow Fever. The opinion of no one man, however versed in the practice among yellow fever patients, would obtain the confidence of the profession, and Dr. Cochran has wisely set forth the treatment among physicians living where this fever prevails. He gives us the Havanna treatment and the American treatment, collected from the clinical work of practitioners who have had to deal with it, and the result is the most satisfactory

presentation of the subject we have seen. The Diseases of the Rectum and Anus, by Charles B. Kelsey, M.D., is largely surgical, as of course it must be to be complete, but such articles could, without any detriment, be relegated to purely surgical works. This volume fairly places this System of Therapeutics before the profession, and we are satisfied that it will meet with marked approbation, taking its place easily by the side of Pepper's System of Medicine. As to typographical excellence, nothing more beautiful could be desired than the execution of these two volumes.

THE PRINCIPLES AND PRACTICE OF MEDICINE, Designed for the Use of Practitioners and Students of Medicine. By WILLIAM OSLER, M.D. New York: D. Appleton & Co., 1892. 8vo. 1075 pages.

Ever since the announcement that a Practice of Medicine was in press from the pen of the distinguished professor of that branch in the Johns Hopkins Hospital, the profession have looked forward with interest to the issue of the volume. It has been on our table for a few weeks, and lest our readers should grow impatient by longer delay, we give the result of our insufficient reading.

The volume is essentially a practice of medicine, giving no place to general pathology according to the custom of most authors. A simple but adequate nosological arrangement is adopted, and, under the first section of Specific Infectious Diseases, Typhoid Fever is the first disease treated of. Dr. Osler says that Dr. Gerhard, of Philadelphia, was the first to lay down clearly the difference between typhus and typhoid fever; "his papers in the American Journal of Medical Sciences are undoubtedly the first in any language which give a full and satisfactory account of the clinical and anatomical distinctions we now recognize." This will be a new fact to many readers who had it settled in their minds that the profession owed this to Louis, but the quotation is made for the purpose of saying that in this item, as well as in all of the volume, we find our author painstaking in attributing the work of discoverers to the proper persons. It is gratifying to note how large a share of original work was done by American physicians.

Many readers will take the first topic of the book as a gauge of the value of the rest, and if they do so the author will suffer no misjudgement at their hands. In thirty-nine pages the subject has

been condensed, but the student will be satisfied that it is sufficiently elaborate to convey to his mind all that is essential. The consideration of the specific germ of diseases is not so entirely new as to be considered a novelty, but there have been a great many "uncertain sounds" uttered upon the subject, but our author makes us feel that now we may have the assurance of the true relation of germs as far as can be authorized. There is a bacillus constantly associated with typhoid fever, the discovery of which we presume he divides between Eberth, Koch and Gaffky. It fulfills the law of Koch in two particulars: that it is constantly present, that it grows outside the body in a specific manner, but the third requirement, that typhoid fever can be produced by inoculation with these cultures, has not been accomplished. Outside of the body these bacilli retain their vitality for weeks in water. Both Prudden and Ernst have found it in water filters. "It has not been definitely determined whether the constitutional disturbances in typhoid fever depend upon the toxalbumins produced in the growth of the bacilli, though this is in the highest degree probable."

Under the head of Treatment we have this pithy sentence: "The profession was long in learning that typhoid fever is not a disease to be treated by medicines. Careful nursing and a regulated diet are the essentials in a majority of the cases." Indeed, thorough conservatism in treatment is shown throughout the work. In reference to the treatment of meteorism he says that the employment of oil of turpentine was extensively used by the older Dublin physicians, introduced into this country by the late Geo. B. Wood. "The routine administration of turpentine in all cases of typhoid fever is a useless practice, for the perpetuation of which, in this generation, H. C. Wood is largely responsible."

Some diseases are not so fully treated of, as we could desire. For instance, influenza, of which there has been abundant experience during the preparation of the volume, and diphtheria are not up to the standard we had hoped to get. A little over two pages is given to the former and twelve to the latter. No new material seems to be forthcoming upon diphtheria, but it is perhaps our anxiety to have fresh facts leading one to victory over this most fearful enemy of the children, that causes us to feel disappointment. But to over greater dismay, he demolishes the mercurial treatment.

It is not necessary to recite more particulars as to this volume.

It is the work of a clinician who, from the fulness of a large experience, has written just such a volume as the physician needs for daily consultation and study. As a text-book for students it is admirable, and to say that it is the equal of those of Flint and Loomis is a just estimate, although in many particulars it is superior to either. The material is fresher, more comprehensive, and has for its basis a very extensive research in all the more modern lines of thought and study.

A DICTIONARY OF TREATMENT, OR THERAPEUTIC INDEX, including Medical and Surgical Therapeutics. By Wm. Whitla, M.D. Revised and Adaptee to the United States Pharmacopæia. Philadelphia: Lea Brothers & Co., 1892.

This is a stout volume $5\frac{1}{2}x8\frac{1}{4}$ inches, of more than 900 pages, treating of practical therapeutics alphabetically arranged by diseases. By reference to our columns our readers will see that there is no lack of books on this subject, indeed, medicine has reacted from a state of therapeutic nihilism of twenty-five years ago to a most prolific outpour of remedies. Many of these books are by masters, and can be relied upon as faithful expositors of the application of every known remedy.

The difficulties of such authorship are very great to a conscientious writer, which we realize when we consider the statement of our author that, although he intended to compass his subject within 50 or 60 pages, it extended to nearly 1,000, with the greatest difficulty of keeping it within its present limits.

We can say of this book that it is safe and conservative. One consulting its pages will not be carried away with the newest discovery of "the coal tar series," or the many "ines" and "blind remedies" which American doctors have obtruded before them daily. The well-balanced practitioner who is not under the dominion of the last new remedy, will be pleased with a volume that everywhere shows judicious estimation of medical and surgical therapeutics. This book can safely be added to the office-table volumes, without the danger of its going out of date before the season is over.

SOCIETY MEETING.

THE BUNCOMBE COUNTY MEDICAL SOCIETY.

The regular meeting of this Society was held at Asheville on April 4th, 1892, the President, Dr. Karl von Ruck, in the chair.

Dr. A. J. Watson read a paper on the treatment of abortion, which will appear in full in a future issue of this JOURNAL. paper does not deal with other than those cases in which abortion is inevitable, and the author believes that to be the case when there is pain, hæmorrhage and a sufficient dilatation so that the finger can touch the fætal ball. In the majority of cases, as long as no meddlesome interference is practiced and the membranes are preserved intact, nature will expel the ovum unassisted. Failing to do so, however, the assistance should then be prompt and judicious. Previous to the end of the second mouth no placenta is formed, and all care must be used to keep the ovum intact. If the membrane has ruptured, hæmorrhage is more troublesome, but after the middle of the second month there is danger of a portion of the placenta being retained should delivery be effected immediately. In such cases the author advises the use of hot douche at a temperature of 120 F., to be continued for at least half an hour, unless we proceed at once to the tampon made of aseptic material, and which, when properly applied, may remain twelve nours. Retention of placenta or membrane the author advises to be removed at once, delay being dangerous, since hæmorrhage and septic infection are likely to occur; under the usual antiseptic precautions, the removal should be made with an ordinary large curette, in the case of membranes, and the placental forceps after two and one-half months' gestation. The patient should be kept in bed for ten days. The author then reported a case of criminal abortion, septic symptoms had supervened when he was called. Under the use of continuous hot water irrigation for three hours the temperature fell from 105° to 99°, the pulse from 120 to 100, and shortly after a partially decomposed fætus with punctured membrane was expelled.

DISCUSSION.

The President invited Dr. Chittick, of Detroit, and Dr. Ander-

son of Swanee, Tenn., who were present as guests, to take part in the discussions.

Dr. Williams: I do not believe that all cases which present the symptoms of pain and hæmorrhage and dilated cervix will necessarily abort, or that on such account we are always justified in proceeding to empty the uterus. I have seen in my practice quite a number of such cases which yielded to preventive treatment, and the women subsequently went to full term.

Dr. Burroughs: I believe that a placenta exists much earlier than after the second month.

Dr. Fletcher: I cannot agree with the essayist in his advice to use placental forceps for removal of retained portions of placenta. In the cases where the placental forceps can be introduced I find I can also introduce my finger, and I succeed with it much better, having the advantage of the sense of touch, than with the usual cumbersome placental forceps.

Dr. Chittick, of Detroit: I believe that a discrimination should be made between cases where criminal interference brought on the symptoms of abortion, and those which result under ordinary circumstances; the former require prompt action on the part of the practitioner, whereas, in a goodly number of the latter abortion may be prevented by judicious treatment, even if pain, hæmorrhage and dilatation have appeared. In retention of placental portions and membranes of accidental abortion undue haste in their removal is not necessary unless the case is already showing symptoms of sepsis. I would like to call particular attention to the use of the viburnium prunifolium in threatened abortion, and have succeeded in preventing it in a number of cases, when the symptoms of pain, hæmorrhage and dilatation were well marked.

Dr. Whittington: I have only recently met with a case where there was pain, hemorrhage and dilatation, and where, under the use of opium and viburnium prunifolium the symptoms subsided, and gestation apparently continues, a month having now passed since the occurrence.

Dr. Anderson, of Swanee: I have seen good results from the use of viburnium prunifolium, combined with opium and rest, and consider it a valuable remedy in threatened abortion.

Dr. Watson: In my experience I have never been able to prevent it when that stage of the abortion was reached.

Dr. Whittaker read a paper on the Treatment of Typhoid Fever Thirty Years Ago, in which he showed that the profession in the South depended chiefly upon turpentine and brandy at that time, although some used calomel and others veratrum viride. Under the latter drug the results were especially disastrous, but the Doctor thought so well of the turpentine treatment that he continues it to the present day.

A general discussion followed on the modern treatment of typhoid fever, and turpentine was advocated, especially by Dr. Burroughs, both for its antiseptic as well as hæmostatic properties. Most of the speakers were in favor of a calomel purgative in the early stage of the disease, and the concensus of opinion was that drugs have little influence and that they should be used sparingly, dietary measures and judicious use of stimulants being most important.

Dr. Weaver spoke in favor of the antiseptic treatment with carbolic acid and iodine, and in cases with much fever advocates the use of the cold pack.

Dr. von Ruck called attention to the antipyretic treatment of Brand by the cold bath, which is gaining in favor whenever proper facilities exist for its scientific application.

The Society then adjourned.

PROPHYLAXIS AGAINST SYPHILIS.—"Personal purity is the prophylaxis which we, as physicians, are especially bound to advocate. Continence may be a hard condition (to some harder than others), but it can be borne, and it is our duty to urge this lesson upon young and old who seek our advice in matters sexual. Certainly it is better, as St. Paul says, to marry than to burn, but if the former is not feasible, there are other altars than those of Venus upon which a young man may light fires. He may practice at least two of the five means by which, as the physician Rondibilés counselled Panurge, carnal concupiscence may be cooled and quelled—hard work of body or hard work of mind. Idleness is the mother of lechery; and a young man will find that absorption in any pursuit will do much to cool passions which, though natural and proper, cannot in the exigencies of our civilization always obtain natural and proper gratification."—Dr. Osler, Practice of Medicine, p. 180-

CURRENT LITERATURE.

A CHANGE OF OPINION ABOUT THE NATURE OF PNEUMONIA.

"It can hardly be held that acute pneumonia, in its ordinary manifestations, is a common inflammation; a blood state, either engenderad within or without the body, is absolutely necessary to explain its occurrence. Its main characters are those of a general, and not a local, disease." Again, after comparing the causation of pneumonia with that of typhoid fever and diphtheria, he says: "To sum up this subject, I believe that the evidence at present existing tends to show that pneumonia may arise from miasmatic influences of the pythogenic kind, and that it is very possible that this way be the origin of a large proportion, if not the whole, of the case of acute primary pneumonia."—Wilson Fox's "Treatise on Diseases of Lungs."—Lancet.

"A change of opinion has of late taken place as to the nature of pneumonia, which is now almost universally regarded as a specific infectious disease, depending upon a micro-organism. Among general circumstances favoring this view is the concurrence of pneumonia in epidemic form, a fact recognized by Laennec and Grisolle. Many house epidemics have been described within the last twenty years. On several occasions I have known two, three, and even four, persons admitted to a hospital from the same house.

. . There are instances on record in which as many as ten residents in one house have been attacked. . . . The diplococcus pneumoniæ of Fraenkel is the most constant organism in lobar pneumonia and is now believed by many competent authorities to be the specific agent of the disease."—Osler's Practice of Medicine.

"All must admit, however, that as regards the bacteriology of pneumonia there is as yet scarcely sufficient evidence to establish the dependence of the disease upon one specific germ."—Edwin E. Graham, in Hares' System of Practical Therapeutics.

Mosler, in Brit. Med. Jour., January, 1891, gave in detail a series of acute pneumonias in a family where there seemed every reason for believing that contagion was the cause of the spread of

the disease. He thinks that the father acquired the disease outside, and it was conveyed in turn to the members of the family through the sputa. Grawitz found in the blood drawn from the lung bacilli resembling rabbit-septicæmia, but neither the pneumobacillus of Friedländer, nor the pneumococcus of Frænkel. He believes that varieties of poison may give rise to pneumonia, but that the main lesson in the case is the contagiousness, and "the need of the careful disposal of the sputa by disinfection or otherwise."

Sturgis and Coupland, in their "Natural History of Pneumonia," in regard to direct infection, assume a wise reserve qualified with skepticism. The vexed pathological question as to whether the disease is general or local, zymbotic or idiopathic, is approached in a spirit of compromise."—Sajous' Annual, 1891.

TOBACCO SMOKING.

The British Medical Journal mentions an agitation in favor of the suppression of tobocco smoking, and predicts that the movement will write down the President of the Anti-tobacco Society and his associates as a body of harmless fanatics. "Tobacco has taken its place as meeting a universal taste and conferring a "privilege" appreciated by thousands, and they should address themselves to those excesses of smoking which are manifestly injurious."

[There is little prospect that a crusade against smoking and chewing will be successful, or even make an impression upon those addicted, but the passing generation has seen the habit of snuffing tobacco by the nose pass completely out of existence. The gold and silver snuff-boxes and fragrant tonkas, the social pinch at the street corners, in the parlor, anywhere, everywhere, the loud blast of the well trained nose with thickened and engorged lining "tooted" in church, in public, in private, the nasal tone of voice, only remain in the memories of the boys of the 40's and thereabouts. Is it not possible that we may see as great a revolution in the coming generation?

Tobacco is a tremendous tax on this generation, taxing the pocket and the nervous system; taxing the patience of the abstainers in public places, and the patience of housekeepers. No one can say it does not very great evil, but few are willing to listen with patience to a recital of the objections against it.]

THE USE OF ALUMINIUM FOR FOOD-CONTAINING UTENSILS.

The London Lancet gives the results of some investigations as to the uses of aluminium. Culinary vessels and surgical instruments have been made of it. Professor Lunge has instituted some new experiments with results as follows: The action of coffee, tea and beer upon aluminium vessels is nil or practically so; that of brandy is extremely slight; the action of acids and acid liquids (wine, sour-milk, fruit juices) is more pronounced, but even in this case, he says, far too slight to cause any alarm whatever. Taking the worst case, that of acetic acid, he found a maximum attack of less than five milligrammes per 100 sq. centimeters in six days, and a canteen holding a litre, and having on its inner surface about 600 sq. centimeters and an aluminium weight of about 200 grammes, would in the very worst case lose 5 milligrammes in a day, or one gramme in 200 days, even if it were always full. At this rate only in 55 years would it be reduced to half its weight.

Finally, he declares that aluminium may without any fear be employed for canteens or any other vessels used to hold articles of food, at least at ordinary temperatures.

REACTION OF URINE WITH ETHER.

Dr. Andrew H. Smith, of New York, gives in the London Lancet, March 26th, a new observation upon the reaction of urine with ether. If urine, taken promiscuously, be thoroughly agitated with ether in a test tube, there will result, in most instances an abundant white foam. If now the tube be corked and set aside, this foam rises to the surface and gradually condenses into a greyish gelatinous plug, so firm that the tube may be inverted without disturbing its contents. Pending a thorough chemical investigation as to the nature of the substance thus separated from the urine, he finds that the reaction takes place in urine that gives no reaction for albumen or peptones. It occurs in urine from which the phosphates have been removed, and it cannot be obtained with simple solutions of urea or the urates. It is most abundant in the urine of those who

have a good appetite and good digestion, and is usually absent after long fasting, or when the diet is greatly restricted. From this fact it probably represents an excess of nutritive material taken into the blood and thrown off by the kidneys, and not a product of disassimilation.

PREVENTION OF MAMMARY ABSCESS.

Tarnier insists upon women being kept very clean in childbed. Their hands must be wasked, else the nipple may be contaminated by a finger that has just touched the vulva. The nipple should be washed both before and after every act of suckling, with water that has been boiled, or with a solution of boric acid. The washing must be done with clean lint or sterilized wool, and not with a sponge. The preliminary washing is necessary, as there might be microbes on the nipple, and the child's mouth might transfer them to a minute fissure, frequent on the nipple after delivery. The second washing removes from the nipple all milk which, if left there, might become a breeding ground for germs, and thus set up abscess, or infect the child's mouth and cause aphthæ. Professor Tarnier takes a stronger precaution in his wards. Every woman has her breasts dressed, as a preventive measure, with a compress soaked in a 1-5000 sublimate solution, held in place by strapping, as the pad is likely to slip; a band of gauze is passed round the thorax and wound around the breasts, so as to envelop them completely. There were, in consequence, only two cases of abscess of the breast from November 1, 1889, to July 15, 1890, and in both the mammæ were, for different reasons, neglected. This application of sublimate cannot possibly hurt the fetus. A syphilitic infant can safely take 5 minims of Van Swieten's solution. The equivalent of that dose in a 1-5000 sublimate solution would be 25 drops, and a child suckling a breast dressed as above described could hardly swallow a trace of the mercury.-Journal des Sages, Brit. Med. Jour .- Archives of Gynecology, Obst. and Pediatrics.

PIPERAZANE is being pushed by the advertisers in the druggists journals, selling for 80 cents a drachm. A dear chemical to use for experiments. It takes 15 grains for a day's dosing.

THE PATHOLOGY OF PNEUMONIA.

The pathology of pneumonia is one of the quastiones vexata of medicine. The disease has so many points of resemblance, on the one hand, to the specific fevers, and, on the other, to acute pulmonary affections, that the determination of its true pathological relations is a most difficult and complex problem. The question at issue becomes still more interesting when we remember that, not only has pneumonia been a puzzle to the pathologist, but its treatment has been one of the great controversies of therapeutics. We naturally turn for light on these subjects to such a work as the exhaustive "Treatise on Diseases of the Lungs and Pleura," by the late Dr. Wilson Fox. "Two opposite theories," the author informs us, "have been advanced regarding the origin of pneumonia, both of which are supported by certain facts and opposed by others-(1) That pneumonia is a 'specific' fever, of which the disease in the lungs is only a local effect; and (2) that it is a purely local disease, of which the pyrexial and other phenomena observed are only the immediate consequences." In favor of the first view are the following facts: (a) negatively, the absence in a large proportion of cases of any discoverable cause likely to excite inflammation of the lungs, and (b) positively, the suddenness of the onset of the disease, its well-defined course, its occasional epidemic and contagious character, the presence of bacteria in the blood, and the frequent appearance of a cutaneous affection (herpes), possibly analogous to the rush of the exanthemata. A point corroborative of the above is the well known want of synchronism between the clinical progress of the case and the pulmonary condition. Thus, it is very common for the temperature to fall to normal and all the symptoms to abate, while the physical signs of pulmonary consolidation remain practically unchanged. Less frequently, but still not very rarely, the consolidation may show signs of resolution before there has been any abatement of the clinical symptoms.

The above evidence seems strong, and if we confined our attention to it we might conclude with some confidence that pneumonia must take its place among the "specific" diseases. But, unfortunately, there are some points of great weight that tell against this view. Thus pneumonia is only very exceptionally epidemic, and its contagiousness, although held by some good observers, is still

doubtful. Again, the influence of season is very apparent. The preponderance of pneumonia falling in the months from January to May. It might be urged, in reply to this, that just as pneumonia shows a preference for the late winter and early spring, so typhoid fever inclines to occur as an autumnal disease. But it seems impossible to resist the evidence that the frequency of pneumonia is much influenced not only by season, but by weather, cold winds and sudden changes of temperature predisposing to it. In this regard pneumonia shows an affinity with pulmonary disease and other affections that are admittedly due to "chill." Then, again, while there is often a want of synchronism between the physical signs and the symptoms of pneumonia, we have to recognize, on the other hand, such a fact as the greatly increased mortality which attends bilateral, as opposed to unilateral, pneumonia.

In so far as treatment throws any light on this subject there are facts on both sides. The general stimulant treatment of pneumonia, now almost universally adopted, hardly differs essentially from the treatment of the continued fevers, and is obviously adapted rather to the theory that pneumonia is a "specific" disease than to the belief that it is a local inflammation. On the other hand, local applications to the chest in the form of poultices, icebags, etc., have enjoyed much favor, and have been believed by some authorities to influence the progress of the disease. Stimulating expectorants, again, generally play a considerable part in the therapeutics of pneumonia. Summing up the subject, William Fox wrote: "The theory of a 'specific' cause can scarcely be maintained for pneumonia in the same sense as that in which the term is employed for the contagious pyrexial diseases. The causes of pneumonia are manifold, and the disease may originate under such diverse conditions that it seems impossible to attribute it to any single blood poison. On the other hand, the most probable hypothesis to explain its origin is that of an altered composition of, or the existence of some morbid material, in the blood, which, from its special qualities, may affect a particular organ, or, as is more probable, may, under local predisposing causes, excite inflammation in that part of the system which in any given individual is the most liable to suffer, as a locus minoris resistentiæ." We have no knowledge of the nature of the changes in the blood that predispose to pneumonia. The excess of fibrine that has been described has been shown by Virchow to be

the consequence, rather than the cause, of the pulmonary inflammation. In some cases, no doubt, pneumonia is due to septicæmia, but this is not at all probable of the typical acute disease.

It is rather a curious circumstance that while theoretical considerations and clinical evidence seem at present inadequate to fix definitely the pathological relations of pneumonia, the response of pathology and bacteriology is also somewhat equivocal. It is true, that the researches of the bacteriologist of late years have considerably advanced our knowledge of this part of the subject. From them we learn that the microbe most constantly present in pneumonic exudation, and in that of the inflammatory affections with which pneumonia is often complicated, is the diplococcus discovered by Fraenkel and Weichselbaum; whereas Friedländer's bacillus, like some other microbes occasionally found in pneumonia, is of exceptional occurrence. Nor must the remarkable investigation of the two Klemperers upon the toxines of the first-named organism be lost sight of, as affording additional proof of the specificity of the disease. Nevertheless, when all these contributions to knowledge are collated, it would still seem that much remains to be done before we are in a position to conclude that bacteriology has said its last word regarding pneumonia.

According to Wilson Fox, "the disorder which, on a lesser scale, presents the greatest analogy with acute pneumonia is perhaps acute tonsillitis, where we have the same short initial stage, a similar intensity of rigor and prostration, a similar sadden invasion of pyrexia, and a similar rapid decline of this before the local inflammation has shown any signs of abatement. In tonsillitis, also, we have frequently an equal difficulty with phneumonia, in verifying a distinct cause, and a certain amount of evidence at least exists in the case of the so-called 'hospital sore-throat,' that it may also be produced by other poisons than those originating within the system from the impeded exercise of the function of the skiu." It will thus be seen that the pathology of pneumonia remains a question sub judice, but that the best authorities incline more and more to the specific theory of its origin.— The Lancet.

CORRESPONDENCE

THE VALUE OF THE CURETTE: A RESPONSE TO DR.
J. O. WALKER'S ARTICLE.

HIGH POINT, N. C., April 14, 1892.

Messrs. Editors North Carolina Medical Journal:

DEAR SIRS:—In the March number of the JOURNAL is an article by Dr. Walker, of Randleman, N. C., on the use of the curette, with a report of three cases of retained placenta, all of which he attributes to the use of the instrument several months prior to, and in one case two years before, conception took place. After briefly commenting upon the use of the curette, he gives it as his opinion that it causes retained placenta, and invites the profession to give expression upon the subject.

Having always been an advocate of the curette as an instrument of untold value in diseases of the endometrium, I take the liberty to oppose the doctor's views, and insist that the judicous use of the curette will lessen the trouble referred to.

The only reason given by the Doctor to sustain his belief that the use of the curette causes retention of the placenta is that he has had three cases in the last twelve months, neither of which, it seems, was attended in the delivery of the child by himself, and how does he know but what the complication was the result of an incompetent midwife or doctor, who preceded his arrival, and perhaps the liberal use of fluid extract of ergot per orem, or ergotine hypodermatically, before the third stage of labor was completed. The fact that he has seen three cases of retained placenta during the past year is no argument against the utility of the curette, but rather an evidence of faulty knowledge of obstetrics on the part of some one.

Mundé, Polk and many others who have curetted the uterus hundreds of times, make no mention of having met with this trouble. The gentleman's pathology is certainly wrong, and he has no authority for it anywhere. He has overlooked the fact that thus, in the cases mentioned by him the curette was used (in two of them, at least,) for the very condition which he complains was caused by

the curette—retained placenta. In other words, the cause which produced retention was present before the curette was used. How, then, can be attribute the retained placenta to the use of the curette?

. Let us see for a moment what influence the curette has on a diseased endometrium. We have a patient who comes to us with a history something like this: Six months ago she had a miscarriage; since that time she has had irregular hemorrhages (metrorrhagia), and between the periods of bleeding a leucorrhea, pain in the small of the back, and a weighty feeling in the pelvic region; we place the patient before a good light, pass the speculum, and what do we see!—a congested cervix, an os twice its normal size and very patulous. The sound is passed, and we find the wound to be from one-half to one inch too deep and discharging a thick, tough, semi-opaque substance, showing that the fundus is in a similar condition to what we find the cervix. Now, what is going to relieve this patient quicker and more completely than the curette? If the Doctor knows of a better procedure I would like for him to propose it.

By the use of the curette we not only remove the diseased mucous lining of the womb, but by its application the lymphathic glands, which are large and well developed, and form the base of the mucous lining of the uterus, are stimulated, and a physiological condition is established which will be better adapted for the attchment of a placenta than where conception takes place with the womb in a diseased state and less danger of a retained placenta following delay.

The Doctor speaks of the interior of the uterus being left in a rough, raw-like condition after a curetting. That is true to a certain extent, and a similar state of things is present after each menstruation; and, while I admit that nature would be more gentle in her operations than the average physician in this curetting process, by proper precaution there would be no injury done to any part of the endometrium, and recovery would be almost as rapid from the operation as from a menstruation.

He speaks of the uterus being left in such a condition that it secretes mucus and perhaps pus. Mucus is the natural secretion of the womb, and where pus follows a curetting there was bad, or no, antiseptic precautions taken. I hold that there is no procedure that

can take the place of the curette in saving life and restoring a woman to health, who has a diseased endometrium, that causes pain and frequent hemorrhage.

A case or two in point will suffice to prove the good accruing from the use of the curette:

Case 1 .- Mrs. A, mother of two children, sent for me October 25th, 1891; she stated that two weeks ago she had severe pain in the lower portion of the abdomen and considerable hemorrhage; the pain and hemorrhage had kept up irregularly during the two weeks, but not so bad as at first, until the date of my visit. At that time the hemorrhage was profuse. On passing my finger to the wound, I tound it filled with something that I could not detach and remove; the patient was placed before a good light and a bi-valve speculum passed, I at once recognized the mass to be the remains of a miscarriage, and by carefully passing a pair of long dressing forceps into the womb, I removed the mass almost in its entirety. The os was very patulous, and without the aid of an anesthetic I curetted the entire uterine surface and mopped it out with a strong solution of compound tincture of iodine. hemorrhage stopped at once and the womb contracted firmly before the operation, the patient's temperature was 104, pulse 120; two hours afterwards all pain was gone, temperature normal and pulse 100. The patient made a complete recovery.

Case 2 —Mrs. J, of a neighboring town, mother of one child, came to me November 12th complaining of irregular hemorrhages and pain in region of womb. I suspected that she had had a miscarriage, and so stated my belief to her, but she denied anything of the kind.

Being a lady of average intelligence, I accepted her statement and prescribed according to the symptoms without making an examination. I heard nothing more of the case till December 24th following, just forty-two days, when I was sent for to see her. I learned that she had been having irregular discharges of blood from the time of her visit to the office till the date of my visit December 24th. She had changed from a healthy-looking woman of 140 pounds to an emaciated, bed-ridden invalid. She was suffering considerable ab lominal pain with severe tympanitis and an elevation of temperature of several degrees and frequent pulse. I made an examination and found the os closed, but the womb several

times larger than normal and the vagina was filled with offensive fluid, in character like cane juice. Being satisfied that there was something inside the womb that was doing my patient harm, I placed a tampon of cotton saturated with glycerine and boracic acid firmly against the os and directed her to let it remain until I saw her the next day or the pain became severe. At 4 o'clock next morning I was called to see her because of the pain. On examination I found a mass of membranes and placenta protruding from the os. I removed them at once and used the curette till everything was well cleared from the uterine cavity, and then used carbolic acid to the endometrium. The patient was then put to bed and had an uninterruped convalescence.

Without further expatiation on the article referred to, or the citing of other cases to prove my position, I will close by quoting from an article read by J. W. Long, M.D., before the North Carolina Medical Society at Oxford May 27th, 1890, which so well accords with my views that I trust he will pardon the citation:

"The curette is one of the most highly prized instruments that I possess, for, besides the numerous indications for its use in the non-puerperal state, labor and abortion are of such everyday occurrence and each case being liable to such grave complications of hemorrhage, infection and retention of the products of conception, there is a pressing necessity for some means by which we may 'become master of the situation.' In the curette we have a therapeutic resource that is not only efficient, when properly and judiciously used, both as to time and subject, but is convenient, easily applied and safe."

And will not increase the number of retained placentas.

Very truly yours,

D. A. STANTON, M.D.

A PLEA OF INSANITY.—At a recent trial in Wisconsin, at which a number of men were indicted for murder on account of having taken part at a lynching case, the jury returned a verdict, finding that at the time of the lynching all of the defendants were insane, and therefore not guilty. They also found that since the crime was committed all but three had recovered their sanity, and were therefore discharged from custody.—Boston Med. and Surg. Jour.

CURRENT NOTES.

THE COMING MEETING OF THE MEDICAL SOCIETY—SOME WELCOME VISITORS.—Dr. Landon C. Gray, of New York, and Dr. William B. Pritchard, now of the same city, but a member of the Medical Society of North Carolina, will be with us at the Wilmingtan meeting. These gentlemen are both coming for a vacation and a social visit, but we trust they will not come empty handed. The reputation of Dr. Gray as a teacher and author in diseases of the nervous system is known far and wide. Dr. Pritchard is of our own medical family, and it is not in good taste to give his status. We welcome them both to Wilmington!

FOR BRONCHITIS.—Chief among the expectorants in our day ranks apomorphine: A good prescription for a child is [and in a large dose for children]:

BApomorphinæ hydrochlorat	gr. ss. to gj.
Acidi hydrochlorici diluti	gtt. x.
Syrupi	f 3 ss.
Aquæ menthæ piperitæ	f ₹ iss.

Sig. A half teaspoonful every two hours.

-Dr. J. T. Whittaker in Hare's System of Pract. Therap.

Galen as a Teacher—Profession in Rome.—Galen was distinguished as a teacher as well as a practitioner; indeed, then as now, reputation as a teacher assisted in gaining practice, perhaps even more so at that time, as the lectures and the displays of surgical operation seem to have been of a more public nature. Puschman says of Galen: "In order to become known there [in Rome] he gave public lectures on the structure and functions of the human body. The interest of the subject and the practical knowledge of the lecturer, soon attracted a numerous audience composed of representatives of the most distinguished circles of the capital. Amongst his hearers were men in influential positions, such as the philosophers Eudemus and Alexander of Damascus, the prefect Sergius, the consuls Boëthus and Severus, who afterwards mounted the throne, and Barbarus, the uncle of the Emperor Lucius. In this way Galen succeeded, within a short time, in obtaining a

profitable medical practice." (History of Medical Education, London, 1891, p. 95.) [Medical Profession in Rome.]—They will say or do anything to curry favor with the multitude; they will also flatter and favor; in the towns they will daily salute wealthy and influential persons, walk alongside of them, take them to their houses, give banquets, and behave themselves like buffoons. Others, not only in this manner, but also by the gaudiness of their clothing and their rings, by the splendor of their silver vases and by the troops of followers accompanying them, endeavor to dazzle fools and show that they are persons of tremendous importance and men to be imitated. (Kühn, vol xiv, p. 600.)

Dr. Roberts Bartholow has lost his reason, concerning which the Times and Register says: "With the deepest regret we learn that the doors of the Insane Asylum have closed upon Roberts Bartholow. What an ending for such a life! To the very last no evidence of mental alienation appeared in his lectures or his writings. The habit of a lifetime's assiduous labor carried him along in the well-known grooves, although outside of them his malady was easily discernable. Hard work, no rest, no Sabbath, no vacation; by such means his powerful intellect carried him to the forefront of his profession; but at last outraged Nature reached her limit of endurance and the break-down was complete."—Toledo Medical Compend.

IMMUNITY AND CURE.—F. Klemperer (Berl. klin. Woch., March 28th, 1892) says that the possibility of curing infective disease in animals by the injection of blood serum of protected animals was first demonstrated for diphtheria and tetanus, and has been more recently proved for the pneumococcus infection, swine fever, and the infection with the pyocyaneus. Klemperer has now obtained similar results for the bacillus of mouse septicæmia and for Friedlander's bacillus Mice are peculiarly susceptible to the former micro-organism, and rabbits much less so. Blood serum from the rabbit cannot cure the disease in mice. If the rabbit's ear be inoculated with the bacillus of mouse septicæmia, an erysipelatous inflammation occurs, and the animal is thus made immune against further inoculation with the same poison. With the blood serum from such a protected rabbit, mouse septicæmia may be cured if the treatment be commenced within twenty-four, or even forty-

eight, hours. Mice so cured are immune against the same infection, but not against infection with other micro-organisms. Klemperer obtained the same results with Friedlander's bacillus, to which mice are again very susceptible, and rabbits but slightly so. Thus the effects of such serum is a specific one. Immunity is conveyed from the protected animal to the diseased one. The main thing lies in the rapidity with which this immunity may be brought about. It may take long to establish immunity in the first instance, but when it is conveyed by the serum, ready-made chemical substances are transferred to the animal in question. The cure by such serum is only a further development of immunity. The serum of artificially protected animals is alone of service, and not that of the naturally immune. Views differ as to whether the immunity is brought about by the antitoxic or bactericidal properties of the serum or by the action of cells, especially leucocytes (phagocytosis), but most are agreed that chemical substances formed the foundation of immunity. There are no formed elements in the serum. The proof of the existence of these chemical substances is only a physiological one. The greater the number, the stronger the immunity. Natural immunity is feeble.-Brit. Med. Jour.

THE LAW REGULATING THE PRACTICE OF MEDICINE AND SUR-GERY IN VIRGINIA, AND JUDGE WITTS' DECISION IN THE CASE OF THE QUACK, R. C. FLOWER, "M.C."-Under this caption in Practice we find an article giving the details of the action of the Board of Examiners and its friends in the case of flagrant violation of the law. The case was that of a "faith-healer," who lit upon Richmond and fleeced its gullible citizens of large sums of money. The Virginia Board of Examiners made a strong fight, employing lawyers to prosecute the open violator of the law, but the judge of the Hustings Court decided that the law did not apply to a temporary sojourner. It is not true, then, that the licensing law was pronounced unconstitutional by the Supreme Court of Virginia, for, in fact, "the Commonwealth cannot appeal in criminal prosecutions." We get our information from Practice of March, and we believe that this case will increase the zeal of the profession of Virginia to work for such amendments as will make their law perfect. The failure of the Virginia law, then, is true only as to Richmond and to the itinerant (so-called) doctors. The

opinion of the Richmond judge might not be coincided in in Manchester or Fredericksburg. There is no doubting one thing, though, that such itinerants know where there are good pickings, and address themselves only to those towns.

A GERMAN EDITION of the seconds revision of Gowers' book on the Nervous System has just been published by Cohen, of Bonn, and we understand that an Italian translation is nearly ready.

Exodine and Quickine.—According to the *Pharmaceutishe Zeitung*, Exodyne, an American antipyretic, an analysis of which was made by Dr. F. Goldmann, contains approximately 90 per cent. acetanilide, 5 per cent. sodium salicylate, and 5 per cent. sodium bicarbonate; alkaloids could not be detected in this mixture. Quickine, an American antiseptic, is said to contain one part carbolic acid and 0.02 parts mercuric chloride in 1,000 parts of a mixture of alcohol and water.—*Boston Med. and Surg. Journal*.

PRESCRIBING CLERGYMEN.—Guileless clergymen have been frequently charged with supporting patent medicines with their testimonials, but, according to the Medical Fortnightly, March 15, 1892, they are now assuming the rôle of physician. The Fortnightly remarks: "One of the leading physicians of our sister city, St. Joseph, complains that two ministers of that city, being possessed of more or less medical education, are combining medicine and divinity, and prescribe for the bodily as well as the moral ailments of the members of their respective flocks. Clergymen should find enough to do to attend to the duties usually performed by the members of that profession, and should leave the body to the doctor of medicine, confining their ministrations to the immortal parts of man."—Medical Age.

THE PADDOCK PURE FOOD BILL.—This bill, which seems to have some chance to become a law, has some good features, which on first reading would appeal to the judgment of those who are interested in the regulation of the sale of food and drugs. How it would work is quite another matter, and only the actual test of it would answer that question. By the terms of this bill the inspection and analyses to establish fraudulent admixtures, misbranded goods, or foods or drugs below a certain standard, is to be under

the Secretary of Agriculture, and by the chemical division of his department. The sixth section of the bill defines some of the forms of adulteration:

Section 6. That for the purposes of this act an article shall be deemed to be adulterated—

In case of drugs:

- 1. If when sold under or by a name recognized in the United States Pharmacopæia it differs from the standard of strength, quality, or purity, according to the tests laid down therein.
- 2. If when sold under or by a name not recognized in the United States Pharmacopæia, but which is found in some other pharmacopæia or other standard work on materia medica, it differs materially from the standard of strength, quality or purity, according to tests laid down in said wark.
- 3. If its strength or purity fall below the professed standard under which it is sold.
- 4. If it be an imitation of and sold under the specific name of another article.

In the case of food or drink:

- 1. If any substance or substances has or have been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength, so that such product, when offered for sale, shall be calculated, and shall tend, to deceive the purchaser.
- ². If any inferior substance or substances has or have been substituted wholly or in part for the article, so that the product, when sold, shall tend to deceive the purchaser.
- 3. If any valuable constituent of the article has been wholly or in part abstracted, so that the product, when sold, shall tend to deceive the purchaser.
- 4. If it be an imitation of, and sold under, the specific name of another article.
- 5. If it be mixed, colored, powdered or stained in a manner whereby damage is concealed, so that such product, when sold, shall tend to deceive the purchaser.
- 6. If it contain any added poisonous ingredient or any ingredient which may render such article injurious to the health of the person consuming it.
- 7. If it consists of the whole or any part of a diseased, filthy, decomposed or putrid animal or vegetable substance, or any portion

of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or of an animal that has died otherwise than by slaughter; *Provided*, That an article of food or drug which does not contain any added poisonous ingredient, shall not be deemed to be adulterated in the following cases:

The bill is so worded as to exclude from the prying eyes and chemical scrutiny of the Department of Agriculture the articles in which there is more clear swindling than in any other—the proprietary medicines. We presume this would be impossible, as the wealthy proprietors of two or three of the well-known nostrums could organize a lobby that would bring the friends of the bill to terms in short order. We think it would be well to place such a movement under the scrutiny of two or three bodies not mentioned in the prospectus sent us, and mature it more completely before it is made a law.

The Pharmaceutical Record says:

"Yet nothing can be conceived of more cumbersome, more mischievous, more invasive of the rights of the States than the enormous and expensive establishment which, under the modest name of a "food section of the chemical division," the authors of this bill are conspiring to create. It contemplates a supervision of the entire interstate commerce of the United States, so far as it applies to the foods we eat and the beverages we drink-a supervision that would necessitate the employment of a grand army of spies, informers and inspectors, ready to be bought or sold as occasion might offer, and that, if sought to be carried out, would lead to endless litigation between Federal and State authorities. Legislation of this character Congress had better let alone. The Government has gone far enough in the direction of bureaucracy and its attendant corruptions. The country has enough of patriotism already. The States are able to take care of their own food and drink without the help of the Federal power. They can get along well enough without the tags and labels and certificates of the Agricultural Department. The House of Representatives will best serve the welfare of its collective constituency by leaving the bill where it is or consigning it to an early death."

THE STATUE TO DR. J. MARION SIMS.—The New York Medical Record, April 16th, says that the bronze statue to Marion Sims has

arrived in New York. It is a full-length figure, nine feet high. It awaits the inspection and approval of the Committee on Statues of Central Park. The Record says of it: "The sculptor Ferdinand V. Miller, of Munich, Bavaria, has not only succeeded in making a life-like picture of the distinguished gynecologist, but has given an artistic grace to the pose which will challenge criticism. The pedestal, which will be of granite and eight feet in height, has been especially designed by the same artist, to be in harmony with the lines and purposes of the figure. It is expected that the monument, as a whole, will be completed and placed in its position within the present year, as a lasting tribute to the subject by the members of the profession of this country and other parts of the civilized world."

HEATH ON THE TREATMENT OF THREAD WORMS.—When the last few years the views about ascarides have a great deal altered. It used to be thought that they lodged entially in the rectum, and that the patient could be cured by copious enemata, usually of salt and water. But it has been shown within the last few years that this is not a fact, and that these a scarides have their habitat mainly in the execum, and are to be found, more or less, throughout the whole length of the large intestine. It must, then, be borne in mind that it is not sufficient to attack the rectum with enemata, but purgative medicine must also be given which shall act upon the execum and clear away the worms themselves and the mucus in which they are lodged. You may often see them coming away in large balls as the result of purgative medicine, and until they are thoroughly cleared out you cannot hope to cure the patient.—

British Med. Jour.—Medical Chronicle.

ALLINGHAM'S OINTMENT FOR HÆMORRHOIDS.-

R.—Bismuth, subnit	
Hydrarg. chlor. mit	
Morphinægr. iij	
Glycerini 3 ij.	
Vaselini	

M. Sig. Use in pile-pipe. —Med. and Surg. Reporter.

Warmed Ether as an Anesthetic.—The N. Y. Med. Journ. notes that a Barceloua surgeon has devised a plan for administering ether kept at 87° F.

NEW DRUGS (?)—CINERARIA MARITIMA.—In a li-t of new remedies mentioned in the *Medical News*, we notice that our old friend the "dusty miller" (Cineraria Maritima) has been put on duty again, to cure, by its juice, cataract. Is not this robbing the therapeutic graveyard?

The second annual meeting of the American Electro-therapeutic Association will be held in New York October 4th, 5th and 6th, 1892, at the New York Academy of Medicine, 17 West 43d street. W. J. Morton, M.D.,

H. R. Bigelow, M.D.,

President. Secretary.

HINTS TO YOUNG MEN.—A very valuable and interesting little pamphlet with the above title has been issued by the University. It contains practical suggestions how to get an education, what to study, and how to become speedily fitted for law, medicine, journalism, teaching, business or agriculture. Any one can obtain a copy by addressing President Winston, Chapel Hill, N. C.

Purifying Chloroform by Pictet's Method of Freezing.—Pictet's method of purifying chloroform by freezing, claiming that thereby all impurities were removed from it, has been on trial in London. As predicted by the able editors of the American Druggist, some months ago, purification by this method is a failure. There are always good brands of chloroform on the market, equal, if not superior, to that purified by the congelation process.

The Proper Purgatives in Intestinal Dyspersia.—It is, of course, only the milder laxatives, and such as disturb digestion the least, that are to be thought of. Rhubarb, senna, aloes, sulphur, cascara, magnesia, are among the best. A favorite combination is equal parts of pulverized rhubarb and cardamom seeds; dose, a teaspoonful. Germain Sée prefers the old formula of sulphur, cream of tartar, and magnesia, of each equal parts; Dujardin-Beaumetz, the compound licorice powder. The aloin, strychnia, belladonna, and ipecac pill is an excellent one. "The remedy, says Dr. G. B. Wood, "which we have found most effectual in the permanent cure of a disposition to the accumulation of flatus in the bowels, is an infusion made with half an ounce of calumba, half an ounce of ginger, a drachm of senna, and a pint of boiling water, and given in the dose of a wineglassful three times a day."—Boston Medical and Surgical Journal.

OBITUARY.

THEOPHILUS REDWOOD, Ph.D., F.C S.

The death of this eminent pharmaceutical chemist will be received with regret by all in this country who have followed his useful career as a teacher. His work was especially in the department of pharmacy, but it was pioneer work and substantial work. He was born 1806 in Goverton, England. In 1844 he was made director of the chemical laboratories of the Pharmaceutical Societies and was afterwards made professor of the amalgamated chairs of Chemistry and Pharmacy. He is better known in this country as one of the authors of a Manual of Practical Pharmacy, in conjunction with Professor Mohr, of Coblentz.

SIR WILLIAM BOWMAN, BART., F.R.C.S., F.R.S., LL.D., M.D.

The death of this great man, which took place March 29th, reminds us how long a period of usefulness his life has spanned. He was born in 1816, and was consequently 76 years of age. His habits of careful investigation were early recognized, for as demonstrator of anatomy at King's College Hospital, he could not content himself with the gross anatomy as then taught as the whole of that branch, but went into the microscopic study of the tissues. Fifty years ago he had a world-wide reputation for his description of the structure of the kidneys.

In his earlier life he was known to American physicians as a physiologist. Afterwards his fame was established in Ophthalmology. Upon the decline of the health of Dalrymple and his resignation at Moorfields, Mr. Bowman addressed himself to the surgery of the eye. In this department he achieved great fame as a writer, and as a delicate operator.

Some of his principal works are: "On the Minute Structure and Movements of Voluntary Muscles"; "Observations on the Minute Anatomy and Fatty Degeneration of the Liver"; "On the Structure and Use of the Malpighian Bodies of the Kidney"; "The Physiological Anatomy and Physiology of Man," (Todd and Bowman), and besides these a large number of contributions on the anatomy, physiology and surgery of the eye.

He is spoken of by his contemporaries as one who took a lofty view of his calling, he was active in good works, "he was always wise in counsel, calm, liberal, a lover of peace." A portrait-sketch of him in the *British Medical Journal*, April 2, exhibits the features of a thorough English gentleman, mild and benevolent, and of fine intellectual capacity. Doubtless the profession of medicine in this country would esteem the privilege of owning a copy of the engraved reproduction of the painted portrait, executed by Mr. Ouless, spoken of in the *British Medical Journal*.

D. HAYES AGNEW, M.D., LLD.

Mc med 1 (05) 29:254, # 4, Apr 1892 Dr. D. Hayes Agnew, the famous surgeon of Philadelphia, died at his home March 22d, in the 74th year of his age. He was born in Lancaster county, Pennsylvania, in 1818, and was the son of Dr. Agnew, an eminent physician of that section. After completing his classical education at Newark College, Delaware, he entered the Medical Department of the University of Pennsylvania, from which he obtained in due time his degree of Doctor of Medicine-He started in practice in the rural districts, but soon after moved to Philadelphia, where he early in life became a lecturer on Anatomy in the Philadelphia School of Anatomy. In 1854 he was elected one of the surgeons of the Philadelphia Hospital, and founded the pathological museum of that institution. In 1863 he was appointed demonstrator of anatomy and assistant lecturer on surgery in the University of Pennsylvania, and soon after became one of the surgeons of Well's Ophthalmic Hospital. In 1865 he was elected to fill a similar position in the Pennsylvania and Orthopædic Hospitals. In 1870 the highest point of his ambition was reached by his election to the chair of Operative Surgery in the University of Pennsylvania, which position he continued to hold up to the time of his death. His contributions to surgery have been numerous and valuable, culminating, in the crowning achievement of his life, in the classical and elaborate system of surgery which at once gave him a world wide reputation as a ripe scholar, a judicious teacher and successful practitioner. It will long remain a standard work of its class, founded as it is upon remarkably wide surgical experience in every department of the operative art. As an operator, he was possessed of remarkable skill, and long enjoyed a varied and lucrative surgical practice, which extended over a large area of his native State. His position as a recognized surgical authority won for him the distinction of being chosen one of

the consulting surgeons of the late President Garfield, whom he attended during his long and painful illness, and upon whom he performed a surgical operation with a view of extracting the murderous bullet.

Passing away at a ripe age with a long life of labor in his profession, he has left an honored name, which will always stand in the front rank of representative American surgeons.—Med. Record.

A Test for Butter.—A small fragment of butter is bruised between two object-glasses, and examined under the microscope with polarized light, above a selenite lamp. If the butter be pure, nothing particular is observed; but if it contains a trace of margarine or butter which has been melted, beautiful stars, bright with all the colors of the rainbow, are seen.—British Medical Journal, Medical Record.

Dead Bacilli in Tuberculous Sputum.—The very well-known Japanese bacteriologist, Kitasato, who works in the scientific department of Koch's Institute for Infectious Diseases, has made an important discovery, which will be found in the Zeitschrift für Hygiene. He has discovered, by attempts at cultures from sputa, that the great majority of the tubercle bacilli found in sputum are dead, a fact which cannot be proved microscopically, because dead bacilli stain just as rapidly and as intensely as living ones, from which also they do not differ in form. The same is true of preparations made from the contents of vomicæ. This discovery is of considerable importance, from its bearing on the diagnostic value of preparations from sputum, and on the question of the transmissibility of pulmonary tuberculosis from one person to another.—

The Lancet.

Happy and content is a home with "The Rochester;" a lamp with the light of the morning. For catalogue, write Rochester Lamp Co. New York.

READING NOTICES.

INGLUVIN.—W. R. Warner & Co., desire to send to any physician a sample of this remedy wherever they have a patient resisting all other treatment for sickness in Gestation, Marasmus and Cholera Infantum, for which it has been found to be almost a specific."

NOTE RELATIVE TO THE BUFFALO LITHIA WATER, BY WM. A. Hammond, M.D.—There is a point in relation to the therapeutical efficacy of the Buffalo Lithia Water which has not as vet, I think, received sufficient attention. It is well-known that many cases of diseases of the nervous system are complicated with lithæmia, and that unless this condition is removed a cure is very often retarded, and not infrequently entirely prevented. It is quite commonly the case that in cerebral congestion producing insomnia, nervous prostration resulting from over-mental work or much emotional disturbance, and in epilepsy (to say nothing of many cases of insanity) an excess of uric acid in the blood is often observed. This state appears to be altogether independent of the character of the food, for no matter how careful the physician may be in regard to the diet of his patient, the lithæmic condition continues. I have tried to overcome this persistence by the use of phosphate of ammonia and other so-called solvents for uric acid, but without notable effect.

Several years ago, however, I began to treat such cases with Buffalo Lithia Water, with a result that was as astonishing to me as it was beneficial to the patient, so that now, in all cases of nervous diseases under my charge in which there is an excess of uric acid in the blood, I use the Buffalo Lithia Water in large quantities. By this I mean that I do not have the patient drink merely a tumbler or two in the course of the day, but that I flood him, so to speak, with the water, making him drink a gallor, or even more, in the twenty-four hours. By this course the urine, after a few days, ceases to deposit uric acid crystals on standing, the morbid irritability of the patient disappears, the tongue becomes clean, the wandering pains in the head are abolished, and the system is rendered much more amenable to the special treatment which may be necessary for the cure of the diseases from which the patient suffers.

I have tried carbonate of lithia dissolved in water in various proportions, but it certainly does not, in cases to which I refer, have the same effect as Buffalo Lithia Water.

Washington, D. C., January 25th, 1892.

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The Tonics-Quinine and Strychnine;

And the Vitalizing Constituent-Phosphorus; the whole combined in the form of a Syrup, with a Slightly Alkaline Reac-

It Differs in its Effects from all Analogous Preparations;

and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affec tions of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation

with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; hence the preparation is of great value in the treatment of mental and nervous affections. From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases

NOTICE-CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, finds that no two of them are identical, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychnine in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed

instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. Fellows."

As a further precaution, it is advisible that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness-or otherwise-of the contents thereby proved.

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 $Sterilized \left\{ \begin{array}{c} BEEF, \\ MILK, \\ GLUTEN, \end{array} \right\} Partially Peptonized.$

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There is no food preparation that compares with it in nutritive properties.

It is partially prepared for assimilation, and, therefore, makes less demand upon the digestive powers of the gastric juice.

Being in the form of a dry powder and sterilized, it will keep in any climate. It contains 95 per cent of nutritious matter.

The use of BEEF PEPTONOIDS is indicated as follows:

Convalescence from all diseases, Pulmonary Affections, Pneumonia, Phthisis; Dyspepsia, Gastritis, and all Stomach Ailments; Fevers, Diarrhœa, Dysentery, and all İntestinal Diseases; Marasmus, Bright's Disease, Diabetes, and Excessive Use of Alcoholic Stimulants. BEEF PEPTONOIDS may be given per rectum in all cases where the stomach cannot digest food, and in Debility resulting from any cause.

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This preparation represents BEEF PEPTONOIDS in the form of an elegant cor

dial, all constituents being entirely digested and ready for assimilation LIQUID PEPTONOIDS is a nourishing peptogenic liquid stimulant with the albuminoids in a soluble state with only sufficient spirits added to preserve it. It contains the largest amount of albuminoid principles and the least amount of alcohol that

is possible to use and make a stable compound.

LIQUID PEPTONOIDS will keep indefinitely; its flavor and palatability are such that many who have taken it liken it to a delicate cordial. It will readily be taken by patients who are unable to injest food in any other form (in these cases it has been found to the second of t of the greatest service). In convalescence from fever and other diseases, in loss of appetite, weak digestion and gastritis its effects are positive, and it will never fail to give perfect satisfaction.

There is no preparation in the market that has been recommended so highly by sicians who have carefully tested it.

DOSE .- For an adult, one tablespoonful three times to six times a day, childre nin proportion.

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Caffein. Each dessertpoonful contains:—

Acidi Phosphorici, as grains, ss.

Antipyrin.

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DOSE.—One or two heaping teaspoonfuls in ha tumb e of water. Put up in 4 oz. and 8 oz. Bottles

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., GEO. GILLETT THOMAS, M. D., $\left.\begin{array}{l} \text{Editors} \end{array}\right.$

JACKSON & BELL, PUBLISHERS.

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WILMINGTON, MAY, 1892.

Vol. XXIX

No. 5.1

Thoracocentesis..... READING NOTICES:.....

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It is twice as active as any other pepsin now on the market, and by the process of manufacture which we pursue, is deprived of all septic constituents. This process renders it very palatable so that the most fastidious palate could not possibly object to its taste.

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M.D., GEO. GILLETT THOMAS, M.D.

Number 5.

Wilmington, May, 1892. Vol. 29.

ORIGINAL COMMUNICATIONS.

AN OBSTETRICAL RAPID DILATOR.

H. S. LOTT, M.D., Winston, N. C.

Having felt the want of such an instrument in several cases which have come under my observation, I feel it my duty, as it is my pleasure, to make my conception an offering to the profession, in the hope that it may be of service to my brethren and to parturient women.

The cases in which such a want is felt will suggest themselves to my readers, namely, any critical emergency, where the life of either mother or child, or both, depends upon rapid delivery.

The mechanism of the instrument is simple, but accurate—the dilatation gentle, but sure, and sufficient to allow the introduction and application of either long or short forceps.

Messrs. Tiemann & Co, who made the dilator for me—and it must be made of the best material, else the blades will yield—have kindly furnished me with an electrotype which portrays the instrument very perfectly.

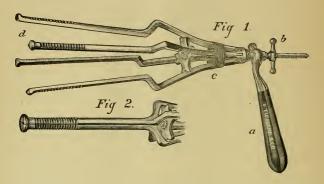


Fig. No. 1 shows the dilator open; (a) is the handle, of hard rubber, rotating on the shaft and tightened with a set screw; (b) is the dilating screw, graduated with letterings and lines to indicate the exact distance the points of the dilating blades are separated; (c) is a heavy rubber band for securing the approximation of the blades for withdrawal when the dilatation is done; (d) represents the four dilating blades—six inches long, corrugated to prevent slipping of the encircling os, and each having a delicate, flange-like projection at its distal point to hold it securely within the os. The blades are highly polished, no abrupt edges to pinch or otherwise injure the mucous membrane of the parts, and when closed for introduction. Fig. 2—The distal points represent a circle the size of a silver dime, with a slight concavity presenting to the child's head, for safety in case of contact during a pain.

Thus we have in the four blades four points of peripheral irritation in the circumference of the os, with a dilatation of three to three and a half inches, after having deducted the probable yielding due to the amount of spring in the blades, which it is impossible to present.

The position of the patient for introducing the dilator must

depend upon several conditions, chief of which are the stage of gestation and the position of the os.

If in a multipara gestation is well-nigh finished, the parts ample, and the os easily reached by the examining finger, no especial deviation from the ordinary dorsal position will be necessary. If, however, we have either primipara or multipara with utero gestation partially advanced, the parts firm and unyielding, the os buried in the hollow of the sacrum, it will then be necessary to elevate the hips, relax the system with chloroform and pull down the perinæuum either with the hand or the duck-billed speculum in order to secure the introduction of the dilating blades.

After introducing the dilator into the os, the handle is firmly grasped in the left hand of the operator, adjusted by the set screw in the best position for convenience relative to the thighs and nates, and the right hand is left entirely free to control the process of dilatation, the rapidity of which must be governed by the condition of the parts.

TREATMENT OF ABORTION.

By J. A. Watson, M.D., Asheville, N. C.

(Read before the Buncombe County Medical Society, April 4, 1892.)

To one unaccustomed in writing to attempt to give his clinical experience, and make it instructive and interesting to anyone else, I find a very difficult task; but in an honest endeavor to meet the obligation that this Society imposes upon me, I will attempt to give my views and experience in the treatment of abortion.

My limited time will not permit me to do more than to discuss those cases where the abortion is inevitable; that is, cases where the essential symptoms of abortion are present, namely, hemorrhage and pain, together with such dilatation of the cervix as will enable the index-finger to detect the fætal globe. These are the cases that require no palliative treatment but prompt expulsion. The fætus may be still retained in utero by the administration of opium, and again by the injudicious use of ergot; but it is done at the risk of septic infection or putrid intoxication, and by no possibility can it

do any good, since there is absolutely no vitality left in the fœtus when the above-mentioned symptoms are present.

It remains, then, simply to determine what are the best methods for getting rid of the contents of the uterus. In the great majority of cases, if there is no meddlesome interference on the part of the attendant, the fœtal sack will be discharged in its entirety, and the after-treatment in such cases should be the same as though the woman had been delivered at full term.

But there yet remains a large per cent, of cases that nature is unable to so happily dispose of, and that require prompt and judicious assistance from the medical attendant. If the abortion takes place before the end of the second month, the question of a placenta does not enter the case; "for, prior to this time, the fætal ball is everywhere attached to the uterine walls and gets its nourishment from the carpet-like surface of the uterus." By endosmosis the nutrient materials in the blood of the mother are taken into the circulation of the fœtus. This is the physiological condition of the fætus until the end of the second month, when a change takes place and the placenta begins to form. It is evident, then, that there must be a difference in the pathological conditions in an abortion occurring in the earlier months of gestation, and one occurring after two and one-half months; but so long as the fætal membranes remain unbroken, this is not a vital point. Hemorrhage, as a rule, is not profuse unless the membranes have ruptured, and consequently the utmost care must be had to preserve them intact.

If the cervix is well dilated and the hemorrhage great, it is a temptation to attempt to detach the fœtal ball and deliver at once, but the risk of leaving a part of the placenta or portion of the decidua is so great that such a course is seldom justified. Ergot is almost universally used in these cases, but so eminent an authority as Dr. Thomas considers it of doubtful value; he claims that it acts strongest on the muscular fibers of the lower segment of the uterus, and aptly compares its use in abortion to driving a spirited horse up to a closed gate and then urging him forward.

I have found the hot douche very effective in controlling hemorrhage; the temperature should be at least 120°, and the stream should be continued for at least half an hour; but the true specific for hemorrhage in abortion is the tampon. This should be made of

aseptic material—cotton boiled in a 5 per cent. solution of carbolic acid and dried, is excellent.

To apply the tampon, have a table brought to the side of the bed with a blanket and pillow upon it. Place the patient upon the table in Sims' position and expose the uterus. The best material for packing the upper part of the vagina with is iodoform gauze. This should be packed into the posterior and anterior or cul-de-sac. If the os be dilated, stuff some of the dressing into it. This will promote reflex pains and hasten dilatation. Below this pack small pledgets of carbolized cotton, squeezed out of a 5 per cent. solution of creoline, until the vagina is well distended, and over this place an antiseptic pad. This must be held in position by a bandage connected with one passed around the waist. The vagina is now secure against the entrance of air or septic germs. In the great majority of instances this will bring the abortion to a successful conclusion. A tampon prepared and applied in this manner may be safely worn twelve hours. When all pain has subsided it should be removed.

If the placenta or any of the membranes remain, they should be delivered at once. Delay is useless and dangerous, since hemorrhage is almost certain to return if any part of the placenta is left, and the broken and partially detached decidua is a favorable nidus for the deadly streptococcus. Antiseptic washes will do but little good unless dead membranes are first removed, which prevent them from acting directly on the uterine wall. The patient should be carefully prepared for the operation; cleanliness is the first consideration and antiseptics the second; under no circumstances should either be neglected. The vulva and anus should be carefully washed with a solution of corrosive bi chloride, strength 1 to 2,000, and the vagina douched with a 10 per cent. solution of creoline Having placed the patient in Sims' position, draw the uterus well down with a tenaculum firmly hooked into its anterior lip; dilate the cervix, if necessary, and with an ordinary large curette scrape out everything within the uterus.

If the time is subsequent to two and a half months, I prefer to first remove as much of the placenta as possible with placental forceps. After the uterus has been completely emptied its cavity should be irrigated with a mild bi-chloride solution, or what is probably safer, a 5 per cent. solution of creoline.

In washing out the uterus, the irrigating bag containing the fluid should not be held higher than two feet above the patient. This will lessen the danger of forcing forcign matter into the tubes. If a Bozeman or Lyman irrigator is not at hand the tube of an ordinary fountain syringe will answer as a substitute, provided a glass drainage-tube be passed along with it into the uterine cavity to insure a free exit for the fluid. After the washing is completed I carry a strip of iodoform gauze well up through the internal os into the cavity of the uterus; this insures prompt drainage for remaining débris and should never be omitted when the curette has been used.

The patient should be kept in bed for ten days. Hot vaginal douches given morning and night; they add greatly to the comfort of the patient; they are perfectly harmless, and finally they promote involution and reduce the danger of pelvice inflammation.

Septic infection and acute metritis are not unfrequent complications in criminal abortion. Prompt expulsion of the contents of the uterus, preventing systemic infection and allaying inflammation is the rational procedure. A report of the following case will illustrate a safe, easy and efficient line of treatment for similar cases:

Mrs. X., finding herself pregnant, resolved at the end of the second month that she did not wish to bear a child, and decided to induce an abortion—She procured an ordinary gum catheter, and on retiring to bed passed it up into the uterus, and, withdrawing the stylette, allowed it to remain several hours; this she repeated the following night, when pain and hemorrhage convinced her that her labor was not unrewarded. The flow continued several days and then became offensive. The pains had given place to a general soreness through the pelvis; rigors and fever soon followed. At this stage I was called in.

I found the patient slightly delirious, though she would answer questions "correctly; temperature 105°, with frequent fluctuations; pulse 120; the surface of the body was quite moist. I found the cervix inflamed and rigid; oozing from the os was an offensive discharge. I decided that the aterus contained a septic fœtus, which was rapidly poisoning the mother, and that prompt delivery was imperative. Ordinarily I should not have hesitated to dilate the cervix and turn out the contents of the uterus with a curette, but the marked metritis and peri-metritis already present gave

doubtful promise of success along that line, so I resolved fo try the effect of prolonged hot douching.

I directed the nurse to project a continuous stream of water, temperature 120°, against the cervix for three hours. The patient was placed over a large tin douche pan so arranged that the water would run out through a rubber tube into a receptacle at the side of the bed. The water was turned and kept up as continuously as possible for four hours; the temperature was now 99°; pulse 100; mind clear; complains of intermittent pains through the uterus; cervix is beginning to dilate. Administered a little stimulant and directed douche continued, which was done at intervals for two hours longer, when there was expelled from the uterus a partially decomposed fœtus with punctured membranes.

The rationale of this treatment is plain and needs no explanation.

THE DISLOCATION OF AN OPAQUE LENS—NATURE'S RARE METHOD OF RESTORING SIGHT TO A CATA-RACTOUS PATIENT.

By JULIAN J. CHISOLM, M.D., Professor of Eye and Ear Diseases in the University of Maryland, and Surgeon-in-Chief of the Presbyterian Eye, Ear and Throat Charity

Hospital of Baltimore City.

As a rule, an eye in which the lens has become cataractous is an eye doomed to blindness, unless surgical relief is obtained. The opaque senile lens, entombed in its capsule, is in a measure isolated against further changes, and remains a permanent obstacle to vision. The passing years are to it as nothing. It is uninfluenced by time. Once opaque always opaque, and that to the end of life. Fortunately, the skilled surgeon has made cataract operations one of the most successful of all surgical procedures. After a painless operation under cocaine and a very short convalescence, the previously blind walk forth alone with sight restored; now made doubly precious by its previous withdrawal. To the rule of success after cataract operations there are but few exceptions. The observant ophthalmic surgeon, educated in the school of a large clinical expe-

rience, is now dissatisfied with himself if he loses even one single eye out of a hundred cataracts operated upon.

This wonderful advance in this special surgery, which the last few years have brought about, is not generally known. Among those with cataract there is a lurking dread that permanent blindness threatens, from which there is no sure escape. Operations they consider very hazardous. Each blind person feels migivings that, in their own particular case, the promises of restoration are rot likely to be fulfilled. They have heard of a great many recoveries after operations, but they have also heard of some failures. The latter make by far the most lasting impressions, hence they recoil from the simple, painless surgical method for obtaining relief.

Gossip, ever active, and in this instance based upon a grain of truth, encourages the blind with the statement that to those who patiently wait, the long wished for comes. This hope is strengthened by the report of some person, long blind with cataract, miraculously restored to sight. For many years this old gentleman had been led about, but now walks unattended. The world wonders. The restored hero delights to relate how, after many years of prayerful longing, the sight suddenly came back to him. The recital of such a rare occurrence is very disturbing to the timid, blind with cataract. It induces some to defer the operation as the very last extremity; and, while waiting patiently for the miraculous restoration, they die with their blindness.

These sudden restorations, described truly as the lifting of the curtain from before the window, rare as they are, have occurred, and will occur again. The explanation is as simple as the occurrence is rare. The crystalline lens is fixed in its proper position by a membrane which incarcerates it between its folds. This membrane is attached by its border to the inner walls of the eye, at the ciliary region. It is this membrane which divides the eye-ball into its two chambers: the vitreous, behind the lens, and the aqueous space in front of it. Nature has secured the lens between the two layers of this membrane so that its centre shall be permanently fixed directly behind the pupilary opening. This supporting and sustaining membrane is called the suspensory ligament of the lens. In some persons this ligament is much more frail than in others. It also becomes still further weakened by atrophy in some catarac-

tous eyes, so that a sudden severe jolt might break it and allow the lens to be displaced from its normal position.

To the blind accidents must frequently occur. They vary from slight bruises to fatal injuries. Cases are numerous in which blind persons have fallen down stair-ways and have been found insensible in the lower hall. In one or two well authenticated cases, when consciousness had been restored to the injured, they saw objects, a pleasure which they had not enjoyed for years. By the violent concussion of the body the suspensory ligament had been torn, permitting the opaque lens to fall away from the pupil. As any other ligament of the body is more likely to be torn than the suspensory ligament of the lens, this accident must be an extremely rare accompaniment of a fall. This yielding of the suspensory ligament and the falling of the opaque lens by gravity into the vitreous chamber has even been brought about without violent succussion. There are still rarer cases known in which this ligament has spontaneously given away. Under a slow process of atrophy it has become so frail that the very weight of the lens has ruptured it. The cataract has quickly and painlessly slided away from blocking up the pupil, restoring vision suddenly to the surprised and delighted blind person.

During my surgical life over 6,000 cataract patients have come under my personal observation, of which nearly 5,000 are entered on the books of the Presbyterian Eye, Ear and Throat Charity Hospital. Amidst this army of blind people only two cases of spontaneous restorations to sight have occurred without the intervention of an accident or any operation. On account of the extreme rarity both are worthy of a place in the literature of ophthalmic surgery.

In the year 1884 I operated upon a lady aged 60 and restored perfect vision to an eye blind eight years with cataract. She was extremely frail, not weighing over 80 pounds, and was nervous to a degree. She was surrounded by every luxury and yet was very miserable. She was very anxious to have sight restored, but was too timid to undergo an operation to regain it. She had been blind and helpless for four years, when one day, sitting alone in her chamber, with eyes closed according to habit, she suddenly opened them on the approach of some one entering her room. She saw first her hands in her lap, and then could discern the approaching

figure. In her fright she thought it a vision, and for some time could not believe her senses. In her case the recovery was brought about by no shock whatever. The sight regained permitted her to enjoy once more active life. As she was a woman of wealth she became the wonder of the city. Her miraculous restoration was the absorbing topic of social discussion. The regained privilege in this case was not permanent. After a few months of happiness, darkness slowly resumed its sway, and she became blind. I had examined the eyes when the cataracts were forming, and also when they had matured. She had made several appointments to have one of them operated upon, but her courage always failed her when the day for operation approached. When sight came back so spontaneously and wonderfully, she was congratulated by her friends for her procrastination. Upon examination of the restored eye, I found the opaque lens depressed in the vitreous chamber and out of the line of vision. In the course of a few months the optic nerve took on atrophy, and all vestige of light slowly and painlessly vanished from this eye. With the other she still had good light perception.

After four more years of blindness, and after much persuasion, she was finally induced to have the cataract removed from the remaining eye. The result was perfect restoration of sight, with the ability of reading the finest print with ease. This sight she still enjoys.

The second case was in a gentleman aged 45. He had lost the right eye when a child from injury with a fork. When I first saw him, in 1888, he had recently become dull of vision in the left eye also. He had been struck in this eye with a twig and the sight had been slowly deteriorating for the past twelve months. Upon examnation the long lost eye-ball was found everted. The pupil was closed and adherent to a calcareous lens. In it there was no light perception. With the left eye he could count fingers at four feet. In this eye there was a well developed senile cataract, a free pupil, with a tremulous iris. As the eye-ball was moved about I thought that I detected a slight motion in the lens. With the ophthalmoscopic mirror a reddish reflex from the choroid could still be seen.

I saw him again in March, 1890. During the interval the opacity of the lens had become complete, and only light perception in this eye remained. He came to make inquiry concerning the operation of extraction. It was not convenient for him to have it done during this visit, but he promised to return to the city in the fall for operation.

November 22d, 1890, he came to the city for examination and to seek an explanation for the miraculous recovery of his vision. When he went to bed on the night of the 5th November, 1890, he was blind as he had been for many previous months. When he had opened his eyes on the morning of the 6th November he could see all the objects in his room. The wonderful transformation from blindness to restored sight had come on during his sleep. An ophthalmoscopic examination showed what had occurred. At the most dependent portion of the vitreous chamber the opaque lens was seen. It had tumbled away from the pupil during the night by the giving away of the suspensory ligament, and no longer interfered with vision. With a 14+D lens his distant vision was 15 and by the use of an 18+D lens he could read the finest print with ease. He had a clear black pupil. I saw this patient again in November, 1891, one year after the miraculous recovery. He still continued in the full enjoyment of excellent vision.

SELECTED PAPERS.

TREATMENT OF PNEUMONIA.

By WILLIAM F. WAUGH, M.D.

In this paper the treatment of lobar or croupous pneumonia, acute pneumonic fever, will be considered, the catarrhal and chronic forms of pneumonic inflammation not being included. The subject is apparently a simple one; yet, judging from the diversity of the views expressed in the medical periodicals, there is far from being a uniformity of belief. Indeed, in no other serious affection can there be found such a variance of opinion, not only as to the choice of remedies, but as to the fundamental principles upon which the use of remedies is based. The reason of this is to be found in an

exaggerated idea as to the rôle of drugs in modifying the course of the disease.

Dr. E. F. Wells read a paper before the Chicago Medical Society in December last, in which he considers the prognosis of pneumonia.

"The death-rate of pneumonic fever varies, according to the statements of authors, from nil to 100 per cent. I have collected and tabulated the statistics of 223,730 cases of this disease, of which number 40,276 perished from the direct effects of the malady-a rate of 18.1 per cent. These cases have been drawn from every available source, from all parts of the world, and have been subjected to every imaginable mode of treatment. Numerous schools of medical philosophy and eras of fashion in therapeutics have also passed through the various stages of their existence during the period of time covered by this inquiry. Notwithstanding this, it will be noticed that the death rate of all the larger collections of cases-with few exceptions-is nearly the same, although they were probably subjected to widely different, possibly diametrically opposite, methods of therapeusis. From this we may infer that treatment alone has exercised but little influence over the natural course of the malady, and that the results of this analysis fairly represent its normal fatality. In addition we have an indirect mortality of about 1.3 per cent. from cases followed by dependent chronic ailments, which, added to that from the disease per se, raises the true mortality rate to about 19.4 per cent."

Little benefit is to be expected from a comparison of results as published. Some observers include the "necessarily fatal" cases, such as those depending upon cancer; terminal pneumonias of diabetes, nephritis and tuberculosis; and, also, such complicated cases as typhoid fever with pneumonia. These should be omitted in estimating the relative values of different methods of treatment, as a series containing a large proportion of such cases could not justly be compared with another series that contained none. The same holds true of cases occurring in connection with delirium tremens; the catarrhal pneumonias of infancy, those occurring in connection with measles and croup, and the dangerous form which occurs in the aged. There is the more reason for separating these groups from the uncomplicated lobar pneumonia of adults, in that the treatment that proves successful in the latter is not necessarily, or even suppositiously, suited to these special classes.

Limiting ourselves to this class of uncomplicated cases, it must be said that the tendency to death is remarkably small for so serious a disease. This is shown by the good results following the most diametrically opposite methods of treatment. The value of tartaremetic is insisted upon by Trousseau, most emphatically, and yet he is said (I quote from Wells) "never to have lost a genuine case in a child." On the other hand, Juergensen stands out prominently as the advocate of the supporting treatment, and his death-rate in uncomplicated cases was almost nil. In Dr. Levick's letter he shows how extreme is the solicitude with which he seeks to protect the heart from any possibility of failure, yet in the quotation from the Proceedings of the Allegheny County Medical Society, it will be seen that there was a unanimous expression in favor of veratrum, aconite and salicylate of soda.

The only way to reconcile such oppositions is by admitting that the tendency is to recovery in nearly every case of simple uncomplicated pneumonia, and that this tendency is so strong that scarcely any form of mismanagement can overcome it; for if the treatment by raw beef, red wine, quinine and cold baths be right, and Juergensen's statistics show it to have been remarkably successful, how can the treatment by veratrum, antimony and venesection be anything but wrong?

The truth is that neither is the heart so likely to fail as the ultra stimulationist asserts, nor is this organ to be harnessed in and curbed like a runaway horse, as the advocates of sedatives appear to think. But if the results be equally good, the quicker relief obtained by the judicious use of sedatives counts in their favor. The observations of our fathers showed that great relief followed the venesection universally practised at the beginning of the treatment, and if the statistics show, as Well's claims, that the mortality is no less now than it was in those days, the practice could not have had the ulterior bad effects its opponents alleged. The truth is, we have dropped an efficient means of palliation without any corresponding advantage.

But we have not lost our patients in the appalling manner the old bleeders predicted. They thought their venesections were absolutely necessary to stay the progress of the disease and to -ave life; but we now see that this could not have been the case. The truth is, that in pneumonia nothing can replace the close attention of the physician. He must be prepared to employ sedatives or cardiac tonics, according to the exigencies of the case; he must be quick to turn from one to the other; to stop his veratrum at the first indication of failing heart, and be ready to bleed if threatening "collateral fluxion" demands it.

If hot poultices are sufficient to relieve the oppressive symptoms in the first stage he may be content to let the patient alone, simply regulating the hygiene of the sick room. And how much this covers in the hands of an experienced physician. The care neces-rary to keep the temperature even by night and by day, and yet to insure free ventilation, and keep the air charged with moisture; the changing of poultices, and of clothing when wet with perspiration, and the avoidance of cold; the use of food, nourishing, yet not stimulating, and the relief of thirst, without overcharging the circulation with fluids, are some of the problems that confront us. These are not easily solved with the assistance of trained nurses in hospitals; in private practice among the poor the difficulties to be met are great.

The use of soups is to be condemned. Niemeyer showed clearly that venesection relieved the oppression due to collateral fluxion, simply by reducing the volume of the blood. The abstraction of the nutritive elements of the blood is to be deplored; it is an unavoidable evil, and one so great that in every case the question is to be decided, whether the gain of comfort and the avoidance of edema of the lung is worth the price paid for it in blood that is all the more valuable under the circumstances. For when a large proportion of the fibrin has been withdrawn from circulation, and the heart has been called upon to do extra work, the nutrition of this organ suffers from the poor quality of the blood furnished for its support.

But the good effects of the bleeding may be lost by the carelessness of the nurse, who allows the thirsty patient to replace the bulk of the blood removed by innutritious water. Here we have the loss without the gain. On the other hand, we may obtain the benefit without the loss, by withholding fluids until the emunctories have thrown off the excess of water. For this reason, instead of soups, the patient should be put upon a dry diet, whose effect in reducing the volume of blood is so great that Da Costa speaks of aborting a pleurisy by it. Thirst is to be controlled by acid solu-

tions in teaspoonful doses, little pellets of ice, teaspoonfuls of hot water, bits of orange-peel held in the mouth, and such expedients. The concentrated pre-digested foods are the best forms of aliment in all cases where a maximum of digestibility and nutritive strength, with a minimum of bulk, are indicated.

With the hygienic conditions properly regulated, and the use of hot flaxseed jackets enveloping the chest, it is only exceptionally any sedative is required. If it be, preference is to be given to the chemical antipyretics rather than to the nauseant emeto-catharties, like veratrum and antimony. Antipyrine, acetanilide or phenacetine, in doses commensurate with the fever and the oppression, are the best remedies. They are safe in the hands of any physician competent to treat a case of pneumonia. The addition of cocaine, in doses of 1-8 to 1-6th grain, does not detract from the antipyretic action, but serves to tranquilize the nervous system, relieve delirium. and in some measure to sustain the heart, without hardening the pulse. The addition of quinine to this prescription is unquestionable. In small doses this drug has no appreciable effect on the temperature, but acts as a heart tonic. It hardens the pulse, however, and increases the tendency to delirium; while it sometimes proves irritant to the stomach or bowels, an occurrence to be dreaded in pneumonia. In malarial districts it is natural that this drug should acquire a reputation in pneumonia that could not be sustained elsewhere. Except when there is a special indication for its use, quinine does not lessen the tendency to death in pneumonia. This does not apply to the catarrhal pneumonia of infants, where large doses of quinine (5 grains by suppository, every eight hours) constitute the most effective means at our disposal for cutting short the attack and bringing on speedy resolution.

If the cough be troublesome, in spite of the measures above described, small doses of Dover's powder or codeine will give relief. But the cough rarely demands special treatment, if the poulticing be well done, and the air charged with moisture.

It has been asserted that if the stomach and bowels are disturbed, the irritation quickly disappears under the use of the sulphocarbolate of zinc, in solution of powder, 2 grains every two to four hours.

In the pneumonia of the aged the mortality is, and will be, much greater. The subjective symptoms are less marked, the fever

latent, and the disease is unnoticed or underrated until well ad vanced; the patient meanwhile keeping on his feet, to the great detriment of a heart already subject to senile changes. The indieation for support of the heart is more imperative here; and the need of sedatives is less, as the symptoms for which they are required are absent. If we once rid ourselves of the notion that bleeding, veratrum, et id omne genus, have no direct influence in cheeking the spread of pneumonia through the lungs, we simplify the question greatly. Hot poultices with mustard, or painting the chest with iodine, are useful. Phenacetine is the only antipyretic to be used; and that only in moderate doses, when the temperature rises above 102° F. The heart must be carefully watched, and quinine, strychnine or sparteine given when required. The physician must not let his patient go without a visit for more than three or four hours, until the crisis is safely passed. Careful nutrition is more than ever requisite; and care taken that the gravity of the case is not overlooked; frequent physical examinations being necessary. Nor should the symptoms be masked by the use of opiates or alcohol. The former are contra-indicated. Of the latter as little should be given as the previous habits of the patient will permit. In pneumonias of all classes this should be the rule as to the use of alcohol. If the patient be in the habit of using alcohol when well, it is unsafe to stop it when he has pneumonia; as the stoppage will cause a relaxation of the heart that has its dangers. This does not refer to the use of stimulants in threatened collapse, where alcohol is peremptorily required; but to its systematic use throughout the course of the pneumonia.

As the sensitiveness of the bronchial mucosa in the aged is weak, the occurrence of coarse râles calls for the use of stimulants, senega, serpentaria, ammonia and sanguinaria, of which the last is the best. Five drops of the tincture may be given, with some ethereal stimulant, quebracho and coca, every two hours. This combination is of considerable value.

Above all else, in the treatment of pneumonia of the aged, from first to last it is imperatively necessary to keep them in the recumbent posture. Dr. Levick must have had these cases in his mind when he wrote his letter. The best way to treat heart failure is to avoid the causes that produce it. Many of the "unexpected deaths" of aged pneumonics are due to the neglect of this precaution.

The treatment of drunkard's pneumonia is the most difficult of all, as the prognosis is the worst. Wells, in the pamphlet already quoted, says: "Huss lost 20 per cent., and Fismer 50 per cent. of the alcoholic cases; and Greene estimates the death-rate of such at from 25 to 50 per cent. I am inclined to think that, in confirmed drunkards, it exceeds even these figures.

"The victim of chronic alcoholism is in such a state of physical and mental weakness as to be illy able to withstand the onslaught of any disease, and especially one of the gravity of pneumonic fever. He is usually a man having the appearance of robust health, but a careful scrutiny will reveal this to be a delusion and a snare. His bloated and rubicund visage, his ponderous abdomen and his full but soft fleshy parts, are no more the indication of strength and vigor than is the padding of a Punch and Judy character. His digestive apparatus is in a state of chronic irritation, and it has for so long a time been accustomed to excessive stimulation that it no longer responds to ordinary irritation, and in the case of disease refuses longer to receive tood cr even the fiery draughts which have been the patient's ruin. The nervous system also weakens very remarkably.

"When pneumonic fever attacks such a person it is prone to pursue a latent and insidious course. The initial chill is either absent or but slightly marked. The patient has for several days lost his appetite and cannot retain upon his stomach his accustomed ration of alcoholic liquors. He is nervous by day and restless by night. He feels tired and languid, and no longer seeks his companions at his accustomed haunts, but prefers to remain at home. and yet is afraid to be alone. With the access of the disease he is at once and completely prostrated. He may have a cough, with expectoration and some uneasiness referable to the chest. The cough, if present, often escapes notice from the fact that these old topers have an habitual cough and hawking. If the lungs be now examined, the ordinary physical signs of pneumonia inflammation will be found. Delirium tremens is of very frequent occurrence, and the patient, obtaining no sleep, together with the constant action, absence of nutrition and the ravages of the disease, soon falls into a state of profound depression and usually dies."

The treatment applicable to the pneumonia of the aged may be used for the alcoholic. To this is to be added the regimen suited

to delirium tremens. The patient is to be watched constantly by competent nurses. He is to be fed sedulously. He must be kept as quiet as possible; the means varying with the case. Very rarely. in young subjects, nothing but tartar emetic will subdue the violence of the delirium. Generally capsicum and coca will have the same good effect they manifest in delirium tremens. Strychnine is often required in doses much larger than are ordinarily given; if the withdrawal of stimulants is followed by symptoms of approaching collapse. The cold bath, if employed at all, should be used with caution. In this class of cases the method of Juergensen did not prove very successful. If the physician be required to visit the aged pneumonic every four hours, he should literally take up his residence with the alcoholic pneumonic. Nobody but the physician can control him, enforce the required recumbency, compel him to take his food, and meet the incessant demands of this most troublesome patient, and the sudden changes in his condition. The exigencies that require such powerful remedies as antimony, require also the judgment of the physician to make a change in the treatment the instant it is required. When such conditions can be secured the death-rate will not be much higher than in simple pneumonia.— Times and Register.

ADENOID VEGETATIONS OF THE NASO-PHARYNX.

By J. A. THOMPSON, M.D.

The vascular supply of the naso-pharynx—the structure being really one large gland, the so-called pharyngeal tonsil—is very profuse, and consequently we have as a necessary corollary to a great supply of arterial blood a very profuse and complicated lymphatic system here. The so-called hypertrophy of the pharyngeal tonsil is an overgrowth of this lymphoid tissue. From some exciting cause it takes on an abnormal growth, preserves in itself the normal histology of lymphoid tissue, but by its growth constitutes a tumor of this region.

The causation of this condition is not very well defined. Many cases are not congenital; the child is born with this condition. I

recall from my experience one case of this kind where I had operated on the father for papillomata of the larynx a few days before the child was born, and, as the minds of the parents were filled with thoughts of throat tumors, they noticed within a few days snuffling, a muco-purulent discharge from the nose, and beginning slight dyspnæa. At three weeks I found the naso-pharynx occupied by an adenoid vegetation, which growth I removed with a curette, and the child made a perfect recovery. The operation was performed when the child was only a month old.

It is a disease of childhood. I think Bosworth is in error in placing a number of cases that he has in this category. He has recorded several cases from forty to fifty years of age which he diagnoses as this condition. But cases of excessive hypertrophy of the granulations in ordinary pharyngitis sometimes undergo a mucoid degeneration and present all the superficial appearances of adenoid vegetations. I do not think these present true hypertrophy of the pharyngeal tonsil. Leaving out of question Bosworth's statistics, more than half the cases will be found in children under fifteen years of age. If the condition was better known among physicians, and was recognized more easily than it is, I think we would find that under the age of seven years we would find most of the cases. On the other hand, Solis-Cohen has reported two cases of hypertrophy of the pharyngeal tonsil in adults, and he discovered them accidentally while treating the cases for laryngitis.

Heredity is a powerful factor in the causation of these growths. I have under treatment a child that is the fourth one in this family with this condition. One I operated on five years ago; two died in convulsions, which I think suffered from this same condition.

The pathology of this condition needs only a few words. Externally we have an irregular growth, often compared to a bunch of grapes, really a single tumor split into a number of deep fissures or lobes. This is covered by a layer of columnar ciliated epithelium, which dips in between the lobes. In the lobes themselves there is no epithelial tissue, but we have an hypertrophy of the normal tissue very poorly supplied with blood-vessels. Mucoid degeneration has often occurred, making it difficult to separate the connective from the adenoid tissue.

Of the symptoms that accompany this condition the mucopurulent discharge is the most prominent in the early stages, and is the one that attracts attention first. The vascular supply of the growth is poor. The epithelial layer is usually but a single layer of cells, and the serum of the vessels seeps and oozes through. The structure of the vessels in the growth is not a perfect one, so that the vessels are easily ruptured, and slight hemorrhages frequently occur. The follicles of the growth are a good culture-ground for the pathogenic organisms, and the serum furnishes then an abundant nutrient fluid, so that we have a favorable condition to produce the muco-purulent discharge, which drops into the throat; or, if the growth be large, it falls forward through the nostrils.

There is a very marked alteration of the voice if the nasopharynx is at all filled with this growth. In a paper which I presented to this Society some time ago, on the physiology of the nose. I called attention to the fact that the tones of the voice are not simple tones, but are made up of fundamental tone and a number of harmonics, which Helmholtz calls overtones. These overtones are normally produced in the naso-pharynx or nose. Where obstruction occurs here the alteration of the voice is so characteristic as to be recognized almost as soon as the patient speaks, and seems to have a greater influence in modifying these undertones than the obstruction of the nose itself. The ability to pronounce nasal sounds is usually lost entirely. There is no possibility of singing for a child with this growth. The larynx makes an effort to overcome with this obstruction and tires very easily. I saw a beautiful example of this a few days ago in a soprano, well known in this city, who had lost her head-register entirely, and the whole cause of the trouble was a comparatively slight hypertrophy of the inferior turbinated at the posterior extremity. A few cauterizations of this region restored the voice, because it relieved the over-taxed arynx.

With the nasal stenosis that comes when these growths are at all large we have mouth-breathing and the facial expression very much altered. This facial expression is altered from two reasons: the mouth is always held open and gives the characteristic stupid appearance, and the interference with the nasal circulation results in a swelling of the roof the nose and a discoloration of the parts around this region. There is also in this condition of obstruction of the naso-pharynx, from reflex causes or from others not well

understood, certainly a marked interference with the cerebral circulation. This condition has been noted only recently by observers, and as yet I do not know of any plausible explanation of the condition. But that it does exist, clinical observers are convinced of. There is an interference with the cerebral circulation that renders the child stupid and unable to continue mental effort for any great length of time.

The secondary diseases in the ear are among the most important symptoms of adenoid vegetations in the pharynx. The chronic form of purulent otitis media is one of the most common. If we have not this as a result we are almost certain to have a chronic catarrhal otitis media. I have had an unfortunate experience in this condition in my own family. My little girl contracted whooping-cough, and this condition was developed in the naso-pharynx. It proved to be one of those cases where successive portions of the gland undergo enlargement; it required four operations to remove the growth entirely. Measles coming on, developed purulent otitis media, which condition has been treated by the most skilled physicians of this city. While it can be checked, still, with any rash exposure, the condition returns. If this case comes in a family of a trained specialist, under constant careful watchfulness, what must be the effect on the ear of this growth in the neglected eases that are not recognized by the family physician, or where the parents do not follow advice and do not give the cases the needed attention? The answer to this question is very easily found. The great maiority of these cases become deaf in one or both ears, and their usefulness in life is diminished 50 per cent.

Headache, in the occipital region especially, is one of the most common symptoms. I have frequently noticed one other symptom in hypertrophy of the pharyngeal tonsil, which is not dwelt upon at any length in any work or any magazine article. In ten out of fifteen cases I have found a history of convulsions at some time. This is well illustrated in the family which I cited a few minutes ago to show the hereditary inflaence. These four children presented about this history: When about six months old the mother noticed that there was an obstruction of the nose: the child did not nurse well, and then would come the nasal discharge; then for two or three weeks, or more, the child would be excessively nervous, would vomit occasionally, and then, through some slight derangement of

health, would come severe convulsions, persisting sometimes for hours. The first two children did not die in the first attack, but the second, third and fourth came, and finally resulted fatally. The third child began in the same way, and was finally brought into the clinic at Miami College in a convulsion. I chloroformed the child to stop the convulsion, and removed the vegetation at the same time. The growth returned several times, and with every return of the growth there was a return of the convulsive attacks, that were speedily arrested by anæsthetizing the child and removing the growth. The fourth child is not quite six months old, but has begun to show the characteristic symptoms. I intend to operate on it to-morrow. The history of every case that I have ever treated and inquired into carefully has shown between the age of six months and two years, at some time, the occurrence of convulsive attacks.

The diagnosis of this condition is made in part from the characteristic facial expression, from the alteration in the voice, by posterior rhinoscopy if the child is old enough to permit of this method of examination, and sometimes the lower border of the growth projects below the lower border of the soft palate, and can be seen by the direct examination. More frequently, however, it carries the palate down before it, and you only see the palate depressed or lowered. Where a direct view cannot be obtained, or where posterior rhinoscopy cannot be practiced, you can sometimes see through the usual cavity. If you cannot get the view, directly or indirectly, and you are suspicious, from symptoms, that this condition exists, it is perfectly justifiable to put in the mouth-gag and to pass the finger directly into the naso-pharynx, where, if this hypertrophy exists, the characteristic sensation will be detected

To make sure that you are not dealing with nasal polypi, it is advisable always to pass the finger to the lower portion of the septum nasi, and follow that up in order to determine the point of attachment of the growth.

The prognosis is always favorable to the recovery from the condition present; not always favorable as to recovery from the resulting ear complications.

I find that the growth recurs in other portions of the field than the one attacked by the operation. I believe the condition to be the same here as it is in nasal polypi. You remove the pressure from the portion of the gland that is diseased, but not yet hypertrophied, and it is very apt to undergo a speedy hypertrophy. Around the site of the old growth there frequently springs up a new growth, not exactly in the same situation, but the same kind of a tumor. A second, third, and sometimes a fourth operation is necessary before the growth is entirely removed and recurrence prevented.

Internal medication has no influence. Caustics are effective in removing the growth if you can apply them without cauterizing something else. They are much slower, however, than the cautery, snare, forceps or curette. Where the growths are small it is possible to remove them by the cautery. But as these cases most frequently occur in children, where the passage is small, I personally prefer other means of destroying these growths. In the use of these forceps you should have two or three different sizes on hand, so as to accommodate yourself to the size and shape of the nasal passage in the child.

In older children the growths can be successfully removed by the forceps under cocaine anæsthesia. But you must pass in a finger at the same time that you attempt to close the cutting edges of the instrument on the morbid growth.

The snare is more difficult of manipulation than the forceps. It does not possess the power that the cutting forceps have of taking some of the normal tissue around the growth, and thus avoid the liability of recurrence.

Ring knives meant to pass in through the nose to the nasopharynx may be a successful instrument where the hypertrophy is in the lateral portion of the pharyngeal tonsil, but certainly they are awkward and clumsy to operate through the nasal passage. It is much easier to remove through the mouth than through the nose.

The curette is a very effective instrument for removing these soft growths. Among the curettes should be included the nail of the index-finger. The growths are ordinarily so soft that they can be easily scraped out by the forefinger. A sharp uterine curette on a copper stem is the best. The copper stem is so pliable that it is easy to accommodate the shape of the curette to any varying arch of the naso-pharynx.

With very small children it is cruel to do this operation without complete anæsthesia; but in older children the use of the cocaine spray or cocaine injected into the base of the growth will overcome

the pain. - Cincinnati Lancet-Clinic.

DRUG MANUFACTURERS AS MEDICAL TEACHERS.

The following circular has been sent to the profession:

Dear Doctor:—At this season of the year the practitioner is called upon to treat patients who have spent a large portion of their time in the house during the winter. They have been breathing the confined house air, which, besides being rendered deficient in oxygen by the necessary combustion going on in stoves, lamps and gas-jets, is, in addition, more or less vitiated by the poisonous emanations of organic life.

During most of this time there has been imperfect physiological action because there has been complete oxidation. The intercellular spaces of the tissues have become clogged up with products of incomplete combustion—imperfect waste and repair.

In consequence of these facts we notice a preponderance of those diseases usually attributed to that indefinite cause—impure blood.

Hence we observe the tendency to scrofulous manifestations—eruptions, glandular swellings, abscesses and ulcerations; also the tendency to a breaking down of the nervous system, with its varied phenomena; the tendency, again, to a lack of prompt response to treatment in acute diseases and slow convalescence from them; and, finally, the tendency on the part of inflammatory conditions of the air passages at this time, unless specially guarded, to become chronic or to develop active degenerative and destructive processes.

To correct the condition we need a remedy that promotes oxidation within the tissues themselves.

Such a remedy is found in ———. However, not only does it thus promote active oxidation, but it also is itself deposited, in its changed or oxidized condition, within the tissues as direct reconstructive material, indispensable to healthy cells and sound tissuewalls.

Thus it proves to be the true alterative agent, inasmuch as it at the same time renovates and nourishes.

Under this remedy we observe an awakened organic action throughout the system and an improvement in every tissue. We soon observe better muscles, bones, nerves, hair, nails, skin and mucous and serous membranes. The entire system awakens to a more vigorous life and performs its various functions with renewed activity.

In these facts may be seen indications for the use of this remedy, especially at this season of the year, in cases which show consumptive, scrofulous or nervous tendencies.

The preparation referred to in this circular purports to be a mixture of a half dozen hypophospnites with nux vomica, erythroxylon coca, and "various adjuvants."

This has the familiar sound of the sarsaparilla advertisements of the daily press. The sentiments are the same, the logic (?) is the same, and the principle is the same.

A few technical terms have been introduced, but are used in so loose and indefinite a manner as to show that the one who wrote it has principally a befuddling object in view. This is an advertisement which is intended to promote the sale of a proprietary preparation, to extend its use at the hands of physicians. It is quite possible that a physician might, by the sight of it, be induced by a hurried reading to prescribe the mixture it advocates, but it is quite certain that there are few so dull as not to be able to detect its sophistries upon a careful reading. It is unnecessary to review the advertisement itself, but it does seem desirable to call attention to its boldest statement, which is the advocacy of a mixture of hypophosphites, most excellent deoxidizing agents, for the purpose of promoting an exactly opposite process, namely, oxidasion.

There is a legitimate field for manufacturing pharmacy, and with regard to it we have naught but words of praise. It is legitimate, it is necessary, that there shall be special workers to supply in the purest quality, and in the best forms, the substances which clinical and scientific research have shown to be useful in the management of disease. But these substances must wait the demand for them. For a manufacturer to attempt to create a fictitious demand for his products by assuming the rôle of medical instructor, is an insult to the profession and a special insult to each individual practitioner to whom he sends his circular. As we see, such men do not hesitate to manufacture explanations of pathological conditions which will apparently favor the use of their remedies.

How absurd it is for men engaged in commercial pursuits to attempt to solve the great and intricate problems of medicine, and how criminal it is to permit the statements of such interested parties to have the slightest weight in deciding questions of treatment.

These are the firms who send drummers out to assist physicians

in their work. There is nothing more aggravating than the representative from such houses. He is frequently a doctor who has failed in his own profession, or who has not yet entered upon it, or else a drug clerk, or a man who has already proven himself successful ia selling new lines of stoves, or boots and shoes. And yet these very men attempt to instruct medical men on physiological and pathological points, and means of treatment, when they have once succeeded in forcing themselves upon their attention. And we hear of these men discussing how little some physicians know of the matter they have in hand. Poor fools, they forget that the poorest medical man they meet is infinitely their superior in point of practical knowledge, and has long ago gone over the subjects they present at the hands of qualified and trained medical teachers.

We are of those who believe that the standard of the medical profession in the United States is high; that the medical men of this country are better educated, and far abler in practice than it is the custom of some pessimists to admit. It never was so slow as to profitably receive professional instruction from uneducated laymen.

It is the duty of the profession to uphold its own honor, and to reject such circulars as the one quoted with the contempt they deserve, and to hereafter refuse to consult with the traveling drummer.—Editorial in Jour. Am. Medical Association.

TWO CASES OF CHOLECYSTOTOMY.

Ву А. Т. Савот, А.М., М.D.

(Read before the Surgical Section of the Suffolk District Medical Society (Mass.), March 2, 1892.)

These cases of operation on the gall-bladder illustrate two quite different conditions. The first is an example of dilated gall-bladder, due to a stoppage of the cystic duct by a calculus, the condition nbt being complicated by any considerable inflammation in or around the gall-bladder. In the second case, on the other hand, there was a very great amount of inflammation about the gall-bladder, and the stones which were the cause of the trouble had

apparently led to a perforation of the cystic wall, and had escaped into an abscess cavity, lying probably behind the gall-bladder. As the diagnostic points of these conditions are of interest to the surgeon considering the question of operation, the clinical histories are given at some length.

Case 1.—Mrs. P. was seen by me September 30, 1891, when I obtained the following history:

For ten years she had been subject to attacks of membranous enteritis, accompanied by nausea, griping pains in the abdomen and constipation. For the past six or seven years she had had frequent attacks of severe pain in the epigastrium, which always required the subcutaneous injection of morphia for their relief. These epigastric attacks always occurred at times of especial fatigue, and came about four times a year; but since early last spring she had had none of them.

She had been feeling poorly, without appetite and listless, ever since the spring. In the summer she made a trip to the mountains and sea-shore without especial benefit. About the middle of August she had a severe lumbago; after three weeks the pain spread itself over the trunk as a severe general myalgia, and, after persisting thus for a week, it gradually subsided, disappearing about ten days before my visit.

She was always of a constipated habit, had never had hæmatemesis nor had passed blood from the bowels; had never been jaundiced nor had clay-colored stools.

After the subsidence of the myalgia pain was still felt in the right hypochondrium; an examination made at this time revealed the presence of a tumor there. Mrs. P. was a well nourished woman of about 38, but somewhat pale. At the time of my visit there was still slight tenderness in the right hypochondrium, though I was told it was much less marked than it had been the week before. The abdomen was soft, and palpation was well borne and satisfactory. Below the liver was a smooth, globular tumor, which reached downwards in the right side of the abdomen to a point below a horizontal line drawn across through the umbilicus. Upon long inspiration the tumor descended still lower into the abdomen, and when Mrs. P. turned on the left side the tumor changed its position till it lay behind the umbilicus, part of it projecting over into the left side of the abdomen.

The opinion was expressed that the tumor was a distended gallbladder, probably containing stones, and an operation was advised.

On October 7, 1891, the operation was done under ether. An incision parallel to the lower edge of the ribs was made over the tumor. This was found to be the distended gall-bladder, and was easily lifted outside of the abdomen. A flat gauze sponge laid under it entirely shut off the wound, and the gall-bladder was then incised in its long diameter, making an opening about one inch long. Through this considerable glairy mucus escaped, little, if at all, stained with bile. Four calculi were removed. One of the smaller ones lay in the opening of the cystic duct, but was easily dislodged. After this bile began to escape through the opening.

The gall-bladder was attached to the parietal peritoneum by a continuous cat-gut suture, and was also anchored to the skin by four silk stitches. The rest of the wound was closed with silk. A large absorbent dressing was then applied.

The patient made a good recovery, although her stomach at first was very delicate and intolerant of food. The opening slowly contracted, and closed without any drawbacks. Mrs. P. was not strong through the winter, and had some discomfort from dragging sensations about the cicatrix.

Case 2.—The patient was a slight, delicate woman of 29, and was seen by me December 8, 1891, in consultation with Dr. A. L. Norris and Dr. J. T. G. Nichols. She had always been troubled with very sensitive stomach that was easily and often upset. Married for a number of years, she had had but one child eight years before. Since that confinement she had always been subject to abdominal distress, and on two occasions had had attacks of what was thought to be pelvic cellulitis. She had also, during the previous two years, had occasional sudden attacks of pain in the lower part of the chest so severe as to take her breath away.

The present illness began four weeks before I saw her, and was characterized by abdominal pain so severe as to require the use of morphia for its relief, felt more in the right side than on the otler. This was associated with much nausca and vomiting, and the breath was extremely fetid. There had been considerable fever with the illness, and Dr. Norris had detected a tumor in the right side of the abdomen, which was very tender to the touch, and which he and Dr. Nichols believed to contain pus. The urine was scanty, high-

colored, and a specimen obtained at the time of our consultation was found to be stained with bile. There had never been any jaundice, and none was apparent to the eye at this time.

The abdomen was distended and tymanitic, not very sensitive to pressure except in the right side, where there was tenderness, both in the hypochondrium and in the right lumbar region.

This portion of the abdomen was occupied by a tumor continuous with the liver, and extending through the right lumbar region well round into that side; this did not move up and down with deep respirations. It being clear that suppuration was going on in the abdomen, probably connected with the gall-bladder, an operation was advised and accepted.

December 9, 1891, operation. Mrs W. was etherized and an incision was made over the tumor parallel to the margin of the ribs. This opened the peritoneum just inside of the point where the inflamed, thickened and considerably enlarged gall-bladder was adherent to the parietes. The gall-bladder could be clearly made out along its anterior edge, but outside and behind it was held fast in an inflammatory mass that masked its outlines. The gall duct was thickened and enlarged to about the size of the little finger, but its walls were so resistant that palpation of it in search of impacted calculi was unsatisfactory. The most careful search failed to show any hard mass in it which suggested a stone.

The gall bladder was opened, giving exit to about two ounces of thick, glairy muco-pus. The cavity was trabeculated and more or less diverticulated. A careful search was made in it for calculi, but none were found. A probe passed along the duct was arrested before it had gone half-way to the duodenum, but there was no hard body to be felt at the point of arrest.

The gall-bladder was stitched up tightly to the peritoneum, a drainage-tube was introduced through the opening, and the rest of the wound was closed.

The patient had a good deal of retching and vomiting following the etherization. The pain was considerable, but was kept under control by the moderate use of morphia.

During an attack of vomiting the patient threw up three or four small biliary calculi, and a few days later several were passed in a movement of the bowels.

Improvement was slow but steady. She began to bear food well,

and the mass in the right side slowly diminished in size. About a month and a half after the operation a small biliary calculus escaped through the fistula. Two weeks later more calculi began to be discharged through the opening, and within the next month thirty-two little stones appeared in this way. All of these stones were small and much facetted.

At this time, while these stones were escaping, I was away, and Dr Norris and Dr. Scudder, who were in attendance, found a hardness just to the outside of the fistula, which gave the feeling as if there were an accumulation of stones just under the abdominal wall; and the patient found that pressure over this spot forced the escape of the calculi. March 2d I etherized the patient for a thorough examination. After enlarging the fistula, it was found that the gall-bladder had shrunk down to a very small size, and the inflammatory mass about it had almost wholly disappeared. Just outside of the fistula, at the point where the stones were thought to have lain, was a cavity between the gall-bladder and the parietes. During this examination the finger penetrated without force through what represented the lower wall of the gall-bladder, into the general cavity of the abdomen Feeling through this opening in the direction of the gall-duct, the parts were found a good deal tied up with adhe ions, but there was no special hardness or thickening to be made out.

It would seem probable that in this case, at the time of the first operation, the gall-bladder had already opened posteriorly and downwards, forming an abscess into which the stones escaped. Subsequently, as the abscess cavity contracted, the calculi were forced up to and through the fistula. The stones which were vomited and which passed through the bowels may have been in the cystic duct at the time of operation and have been masked by the swelling of the walls. In the absence of colic, however, at the time when they escaped into the duodenum, it seems quite as probable that they, too, were in the abscess cavity outside of the gall-bladder, and escaped into the bowel through some ulcerated opening.—Boston Med. and Surg. Journal.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

The Original communications are solicited from all parts of the country, and especially from the medical profession of The Carolinas. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the Journal, by sending the address to this Office. Irompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and accept ability. All remittances must be made payable to Thomas F. Wood, M.D., P. O. Drawer 791, Wilmington, N. C.

THE PRESCRIBING DRUGGIST.

The present condition of those engaged in the retail drug business, with a few honorable exceptions in every town, is that of a merchant in sundries and notions, patent medicines, drugs, eigars, garden seeds and soda-water, about in the order stated. Some include paints and oils, but this business has nearly been abandoned by them, and others include stationery. The real scientific druggists are few and their number is yearly decreasing. There are numerous merchants in the drug line, whose knowledge of drugs is confined to the manufactured articles usually sold, but who would not know many of the leading crude drugs sufficiently well to make

purchases on their own judgment. Very few druggists come into the business now through the doors of a college of pharmacy as compared with the hundreds who pick up the business just as any other merchant learns his. The wonder is, therefore, that the druggist of to-day should do more prescribing than many physicians in active practice. The question arises how do they pick up the knowledge which they esteem sufficient to warrant their dosing customers. Most of them do not read the Dispensatories, one rarely knows the Pharmacopæia, a few of them take a druggists journal, but most of them read nothing but the literature that comes packed with the patent nostrums they sell. There is one other source of information which is often and improperly used-the prescriptions they compound for the doctor's patients. One can imagine the conceit of a young drug clerk who stands rubbing up the ingredients of the doctor's prescription whilst he plies the messenger with questions about the sick one for whom the medicine is designed, and so writes down in his mind the easy wisdom gained, to apply it to the customer who may be in a condition he estimates, or guesses, or believes, to be about the same as the one for whom the prescription has been compounded. The less he knows the more certain he is to try his newly gained wisdom upon the first customer who is willing to take his doses. Doctors generally do not know how greatly this evil has extended. The public looks upon every druggist as a doctor of more or less skill, and the druggist, instead of magnifying his own office, taking pains every day to make himself an indispensable ally of the doctor, allows himself to be dubbed with a title.

The Pharmaceutical Association of North Carolina is not fulfilling the expectations of the medical profession. Their disciplinary influence may be has never been called out, and may be the subject has not fairly been brought before their body, but instead of the occupation of a pharmacist having developed into that of a serious profession, as far as our observation goes, it is degenerating in North Carolina.

There are two remedies that suggest themselves: Reduce the number of drug stores to one for every four thousand people, devoting their sales exclusively to drugs, relegating seeds to the seed-dealers, cigars to tobacco stores and bar-rooms, soda-water to confectioners, notions to the dry-goods men, playing-cards and

stationery to the book-stores, and for self-repect, as educated pharmacists, refuse to sell patent medicines. What would then be left? The druggist could draw in his shop-room, reduce his rent expenses, clerk expenses, etc., and find time to make his own preparations, thereby restoring himself to the esteem of the profession, and then he would come nearer having that knowledge which would fit him for counter-prescribing. But this remedy will not be applied, because no one has the authority to reduce the number of drug stores, and there is no visible desire upon the part of druggists to be anything but merchants—bazaar merchants.

The second remedy is for the doctors to keep their own medicines. Our local druggists have let the art and science of manufacturing go out of their hands, and others have taken up the business on a large scale, placing at our disposal compact and elegant outfit of drugs, assuring accurate division of doses in palatable and portable shape, so that the doctors may carry to the bedside all they will need in ordinary cases, with many advantages to patient and doctor, the greatest of which being the score of economy to the patient. We do not know how near the doctors are to applying this remedy for the evils, but it will come if the druggists do not set on foot a reform in their business.

Unfortunately for these suggestions, neither the doctors nor the druggists are pharmacists of sufficient ability—the former to prepare his own drugs for ready use at the bed-side, and the latter to be a druggist in truth. The doctors, though, have the advantage of very tempting offers from manufacturing pharmacists for such supplies as they need, and more than half the druggists would have to quit the business.

Some of our readers will be surprised at the tone of this article, but it has been prompted by the repeated complaints we have received of late of counter-prescribing by the druggists. What action the Pharmaceutical Association took at its last meeting upon the overtures of the committee from our State Medical Society we do not know exactly, but if our informant is correct, next to nothing. Either the case was not properly presented, or the time has not arrived for either profession to work out a reformation of the evils.

Lest we do injustice to some of our friends in the drug business, we say, in conclusion, that a few of them are well trained pharma-

cists, who do a legitimate business and deprecate the necessity of being bazaar-merchants, but are compelled by multiplied competition to follow the pernicious course. It is more likely that physicians will rally to these few druggists, directing their prescriptions to be filled only by them, than that more radical measures will be at present undertaken. In the meantime the best men in both professions must be considering what is best to be done.

THE BRITISH VACCINATION COMMISSION IS FAILING TO MEET THE JUST EXPECTATIONS OF THE BEST FRIENDS OF VACCINATION.

We learn from the British Medical Journal (April 23d) that "fears are expressed on all hands that the results of the Vaccination Commission, which has been so long in session under Lord Herschell, will be extremely mischievous. The most intelligent and best-informed organs of the press are strongly expressing the opinion, which we voiced some time ago, that the protracted character of the inquiry has been itself a mischief, inasmuch as it has formed a ground of suspension of activity in vaccination by the numerons boards of guardians, who are disposed to purchase immunity from annoyance from the anti-vaccinators by leaving the provisions of the law in abeyance. . . . There are many places where the vaccination law is rapidly becoming a dead letter, and where a relatively large proportion of the young people are unprotected from small-pox."

The same journal quoting from the Standard says: "There is every prospect that the sittings of the Commission will lead to a great increase of small-pox. The solitary good result the report can have is to force men who have been obtaining a dishonest live lihood by writing and lecturing against vaccination, despite their better knowledge, to adopt a new business."

This is discouraging news from the home of vaccination, whence we have drawn our inspiration and our knowledge. Decadence of the practice of vaccination in England is not what we have a right to expect from a country so solid and conservative in all matters appertaining to the public health. In America, where we are pro-

verbially neglectful of the duty of vaccination, until pushed by the appearance of small-pox at our very doors, where the people in all the States arrive at this and all other reforms after the most expensive methods, neglect of proper precautions is the rule. In medicine and in politics it is the same, but the people do finally arise in their majesty and consummate the needed reformation and then fall back into security to let their work move of itself until heroic efforts are again needed. But towards England we have looked with the assurance that there we had the pillar and ground of the faith towards which we could lean at any time.

It has become evident that not only as regards vaccination, but as to all other preventive measures, we need a great epidemic visitation to arouse the people to duty. If now the executive machinery which is designed to put into force municipal and personal preven tion be crippled by neglect or opposition, there can be only a fearful looking forward to the day when pestilence will put in its sharp sickle upon the grain which is ripening for the harvest.

In North Carolina—in all the South—the practice of vaccination is at a low ebb; and in great America some of the teachers and writers of text-books giving a grudging paragraph to the practice, showing their ignorance and indifference. In two very able text-books on practice in our library, we find errors in dates and facts enough to convince one of the perfunctory character of the writing.

Dr. I. Wellington Faison has recently located in Charlotte. We wish him success in his new field.

Ovariotomy in a Patient in Her Eighty-second Year.— The British Medical Journal (April 23d) notes what is probably the oldest case of ovariotomy on record in the person reported to the British Gynecological Society. The cyst was multilocular and extended above the umbilicus. Convalescence was completed in about a month, and the patient is well enough to walk around her garden.

REVIEWS AND BOOK NOTICES.

Physical Diagnosis: A Guide to Methods of Clinical Investigation. By G. A. Gibson, M.D., etc., and William Russell, M.D., etc.; with 101 Illustrations. New York: D. Appleton & Co., 1891.

There is no work of which we have any knowledge that compasses within its pages—small 8vo. pp 375—so much clear, concise and accurate teaching. There are larger and more elaborate works, but the high-water mark has been reached in this little volume. The student of to-day is reveling in the very best of everything for his education, and may be confused by the professional reviewer who speaks so well of so many books; but he will blunder if he does not buy this book, if he does not already own Vierordt's Medical Diagnosis. The publishers have shown their appreciation of the text by doing the very best the Appleton's can do with a manuscript.

THE POCKET PHARMACY, with Therapeutic Index: A Resumé of the Clinical Applications of Remedies Adapted to the Pocket Case, for the Treatment of Emergencies and Acute Diseases. By John Aulde, M.D. New York: D. Appleton & Co., 1891. Much has been said lately adverse to the city druggists who. while serving as pharmacists to the doctors, by filling their prescriptions, have been unmindful of old Buleyn's admonition: "The apothecarie must be mindful that he is but the physitian's cook," Some of them are doing the practice for their neighborhoods, keep a hypodermic syringe for administration of medicines subcutaneously, keep a thermometer for estimating fever, contrary to law, and some of the doctors are getting tired of it and intend to keep their own medicines. This book of Dr. Aulde's, if not intended to help in this movement, will be good to commence with. His list of medicines is very small, and contains favorité medicines that would not be esteemed so highly by others. He has selected twenty-four medicines to be used in the form of tablets, and gives short directions how to apply them. He takes one formula and applies it to 39 diseases. Here it is: Acetanilid 70 parts, caffeine 10 parts, sodium bicarb. 20 parts. The tablet made from the above contains

 $\frac{1}{2}$ grain, being approximately $\frac{1}{3}$ grain of acetanilid, 1-20 grain of caffeine.

Arm a doctor now with a modern satchel with cunningly devised interior, he can take to the bedside of his patient everything he can possibly need in less than 10 pounds weight, save the patient the loss of time and inconvenience of sending a servant to the drug store, apply the remedy on the spot to meet the condition of the patient, have less wasted medicine, and get rid of the phalanx of bottles that stare us all in the face when we have a chronoi case.

The book is not the best of its kind, but will give some new ideas and set some of us in a new direction.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX: A Work of Reference for Medical Practitioners for 1892-Tenth Year. New York: E. B. Treat. [Price \$2.75]

This work is compiled by a corps of editors and contributors, thirty-two in number, with Percy Wilde, M.D., as editor, and P-Watson Williams, M.D., as editorial Secretary.

We find here a larger number of current "remedies" than we find elsewhere. It resembles more the secondary list of the Dispensatory, and makes the impression upon the reader that the reporter has snapped his Kodack on the living enthusiastic declarations of the active young men who are always trying new remedies. One gets so tired of reading abstracts like this: "Kghoriski-Nmodanski says of exstrophine-meta Hexaoxydiphenil that its particular on the nerve-endings of the inhibitory," etc., etc. The learning falls on our ear like the famous but somewhat stereotyped colloquy of Ephraim Jenkinson in the Vicar of Wakefield, who caught the old Vicar once with his wise utterance: "The world is in its dotage; and yet the cosmogony, or creation of the world, has puzzled philosophers of all ages," but when he tried to pass it off the second time even the learned quotation from Ocellus Lucanus was not enough to ensnare the credulous vicar

But our book has its merits, and it is not the fault of the compilers that it is so full of new chemicals, but rather its merit that the therapeutical world has been drag-netted for its treasures, the fault is in us, who, although reviewers, and therefore know how to write books better than their authors, cannot remember the medical properties of chemicals in words of more than six syllables.

The arrangement of the volume is alphabetical by diseases, the ample index making the search for the remedy easy.

The editor has wisely reproduced a paper from Mr. John Hodgkin, F.L.S., F.C.S., giving the graphic formula for the numerous new synthetic remedies, which ought to be studied by the physician who desires to go a little into the mysteries of organic chemistry, and see the source of the unpronounceable and unavoidable jargon of its nomenclature.

A useful table is given, from Hebling's Modern Materia Medica, of the dose and solubility of some of the best known of the more recent remedies.

The publisher has admitted to his advertising pages improper advertisements—"Gleet Specifie" and "Pond's Extract," for instance—which will be an offense to the eye of educated physicians, otherwise the book is worth the price asked for it.

Practical Midwifery: A Handbook of Treatment. By Edward Reynolds, M.D.; with 121 Illustrations. New York: William Wood & Co., 1892.

Why another book on midwifery? This the author answers that, with all the activity in literature of this branch, "it is a curious fact that there has hitherto been no attempt to render the details of obstetrical practice readily accessible to the student." "A five year's experience in the superintendence of the practical work of the advanced students of the Harvard Medical School, in their daily attendance upon by far the largest obstetrical clinic in America (italies by the editor), has fully demonstrated to him the importance in this deficiency in our literature.

We do not hesitate to say that the author has made good his claim, and the student has in this volume a safe handbook.

The pathology of labor and the puerperium are especially well designed to place before the student practical hints of actual practice. The care of the breasts, for one item, is fully and carefully taught, so that the student is able at once to master one of the minor items, as it is usually considered, but one that is important to the woman. It is the mastery of just these details that makes a practitioner acceptable to the most important of all his patients, the mothers.

We took this book up with some misgivings as to its mission, but believe it to be, after a careful perusal, a first-class book for the student, and not as expensive as some of the older text-books. A Manual of Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.C.P., FRS. Second Edition, Revised and Enlarged. Vol. I. Diseases of the Nerves and Spinal Cord; with 180 Illustrations Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St, 1892.

No book on diseases of the nervous system has given so much satisfaction as this one. It has been established in the confidence of those who have specially studied the diseases of this class, and is as frequently quoted from as authority as any work in any language. In this edition 150 pages have been added to the first volume, including new sections on multiple neuritis, beri-beri, brachial neuritis, senile paraplegia, Morvan's disease, and the peroneal type of muscular atrophy, as well as extensive additions to the account of the functions of the spinal cord and the symptoms of its diseases of syringo-myclia, tumors, muscular dystrophy, traumatic lesions, etc.

The observations, which the author makes on nerve stretching, is about to be realized in the experience of the observing physician that nerve stretching in locomotor ataxy, and the extension of the spinal column in the same disease, "will also probably before long be forgotten."

The second volume will soon be issued. It deals with Diseases of the Brain and General Diseases of the Nervous System.

- A HAND-BOOK OF OBSTETRICAL NURSING FOR NURSES, STUDENTS AND MOTHERS. By ANNA M. FULLERTON, M.D. Philadelphia: P. Blakiston Son & Co., 1892.
- A Text-Book of Nursing, for the Use of Training Schools, Families and Private Students. Compiled by Clara S. Weeks-Shaw. Second Edition D. Appleton & Co., New York.

It has not been many years ago that it would have puzzled a doctor to have found a book on obstetrical nursing that he could have conscientiously put in the hands of nurses who were inquiring after the knowledge. Now we have many. This book, written by a female physician, we can heartily recommend to be placed in the hands of nurses as a safe guide. It is beautifully printed, has marginal paragraphic synopses, making it an easy reference book.

The Text-Book of Narsing, by Mrs. Week's-Shaw, has already

been noticed by us in the first edition. In addition to its being a text-book of the first order, it has special merit as an emergency reference book. It would be a healthy change if in the household this work would be substituted for many of the works written to enlighten the head of the family about what to do until the doctor comes.

A Practical Manual of Diseases of the Skin. By George H. Rohé, M.D. Price \$1.25. Philadelphia: The F. A. Davis Company, Publishers, 1231 Filbert St.

This is a compact volume on diseases of the skin belonging to the Physician's and Student's Ready-Reference Series. Dr. Rohé is a practical writer and has given little space to theoretical speculations.

Eighty pages of this small work is devoted to the cutaneous manifestations of syphilis, but not a line to vaccino syphilis, or rather, his index says nothing about it.

Is it not time now that authors on skin diseases should say something about vaccination? If the subject has a proper place it is in a work devoted to diseases of the skin. We are sure that the medical student of to-day knows less about vaccination than any other subject, excepting chemistry, and such instruction is much needed.

Our book abounds in many good formulæ.

Consumption: How to Prevent It, and How to Live with It. Its Nature, Its Causes, Its Prevention, and the Mode of Life, Climate, Food, Exercise, Clothing Necessary for Its Cure. By N. S. Davis, Jr., A.M., M.D. [Price 75 cents.]

Dr. Davis has given a very useful book to place in the hands of consumptive patients or their friends, to give them some intelligent aid in caring for the sick. This booklet, if reduced to a cheaper pamphlet, would be exceedingly valuable to distribute among our patients as a tract. It would defend them from the imposition of the countless sharks who hover around the procession of consumptives who make their annual migrations to the South and to California, like the man eater sharks among the shoal of mullets off our coast in September. The book is published by F. A. Davis, Philadelphia.

A Manual of Venereal Diseases. Being an Epitome of the most Approved Treatment. By Everett M. Culver, A.M., M.D., and James R. Hayden, M.D.; with Illustrations. Octavo. Pp. 294. Cloth. Philadelphia: Lea Brotheis & Co., 1891.

The authors have succeeded admirably in preparing a very practical and valuable treatise on the three venereal diseases, Gonorrhoa, Chancroid and Syphilis; and it is put in condensed form by eliminating long histories and cumbrous statistical tables. The work shows much original thought, at the same time that due attention is given to the best methods of treatment advised in the larger text-books. The book is fraught with much sound advice, and if given a place on the library shelf will almost surely bear the mark of frequent reference.

CYCLOPEDIA OF EMINENT AND REPRESENTATIVE MEN OF THE CAROLINAS.

This is a ponderous work, in two volumes, handsomely bound in leather, full gilt, with numerous portraits. We find here portraits of many distinguished living medical men of North Carolina, and biographical sketches of many without the portraits. We have the same fault to find with this volume that we have with all biographical collections made up by subscriptions.

WE FAILED TO GIVE THE PROPER CREDIT.—In the April number of the Journal we reprinted the excellent article, "Tuberculosis in Cattle; Tuberculin as a Diagnostic Agent," without giving credit to the Medical News. It also appeared in the table of contents as an original article, although in the body of the JOURNAL it was placed under the head of "Selected Papers." The article also bore internal evidence of having been extracted from another journal. We desire to make amends to the Medical News for this apparently reckless appropriation of our neighbor's goods, for that journal deserves a great deal of credit for giving its readers fresh and carefully selected material, and we showed our special appreciation by reprinting this unique article entire, because of the great practical bearing it had on some of the difficult problems of the day in pathology and preventive medicine, and we would be the last to do injustice to its able editor by claiming what does not belong to us.

CURRENT LITERATURE.

WHAT IS A "FELON"?

Burrell (Boston Med. and Surg. Jour., February 4, 1892) is convinced that the term "felon" is very loosely applied to a variety of inflammatory diseases of the finger, and suggests that this term should be abolished and an anatomical classification of the inflammatory affections of the finger be adopted. The classification he proposes is: (1) Dermatitis; (2) parouchia; (3) cellulitis of the finger; (4) suppurative thecitis; (5) periostitis or ostitis of the phalanges. While he feels sure that most practitioners distinguish these various affections, he maintains that the distinction is frequently not made in name, and that the common text-books on surgery neglect to clinically distinguish them. The treatment of these various conditions differs. Dermatitis requires local applications; paronchia, an incision through the nail or its removal, with a proper dressing afterward; cellulitis, a limited incision into the pulp of the finger with evacuation of the pus; suppurative thecitis. an incision through the sheath of the tendon, evacuation of the pus. antisepsis, and immobilization of the fingers, hand and arm; peri ostitis or ostitis, an incision down through the periosteum at the earliest moment. These affections run into one another, and it is at times impossible to make a clear distinction between them, but the distinction is needed, for an incision down to the periosteum is worse than useless in dermatitis, and not necessary in any except in periostitis or ostitis, where such an incision is imperatively demanded .- New York Medical Journal.

STOP SPITTING.

The modern gospel of prophylaxis teaches that phthisis can be abolished from the face of the earth if only people will stop spitting. Says Dr. T. M. Prudden:

"If the vile and increasing practice of well-nigh indiscriminate spitting goes on unchecked in nearly all assembling places and

public conveyances; if the misguided women who trail their skirts through the unspeakable and infectious filth of the street are to be admitted uncleansed into houses and churches and theatres; if theatres and court-rooms and school-houses and cars are to remain the filthy lurking-places of contagia which their ill ventilation and their mostly ignorant and careless so-called cleaning necessarily entail; if in sleeping-cars and hotel bedrooms the well are to follow consumptives in their occupancy without warning, or even the poor show of official disinfection; if in ill-ventilated and ill-cared for dwellings the well must breathe again and again the dust-borne seeds of tuberculosis; if no persistent warning is to be given to the ignorant of the dangers which lurk in uncleanliness—then our task will be most complex as well as difficult in limiting the contagiousness of tuberculosis."

Of course cleanliness and plenty of water are necessary; but, after all, it is the expectoration which carries the germ and promotes the spread of disease. Spitting, it seems, is not only a vile, but an increasing, habit. This is an unfortunate social fact which reformers do not seem to have grasped, despite its noxiousness. Shall we not have to have a Society for the Prevention of Expectoration—except into sanitary spit-cups? If one could stop the spitting habit, prevent the spread of consumption, and finally stamp it out, he would be greater than a tariff reformer.—Med. Record.

EVIL EFFECTS OF CAUSTICS ON THE UTERUS.

Cittadini (Bullet. de la Soc. Belge de Gynec. et d' Obstet., No. 5, 1891) states that a patient, aged 28, was treated in Paris for "hæmorrhagic endometritis. On December 31st, 1890, a stick of chloride of zinc was introduced into the uterine cavity. She was discharged on January 16th in good health; the sound could be passed with perfect ease. The period, due on January 30th, did not appear till February 8th, and the cervix suddenly became contracted. By the end of May the sound could not be passed more than 1 1-5th inch; the stricture seemed to be situated at the os internum. The period continued regular, so that the stricture could not have been impermeable. In the summer of 1891 the patient

consulted Dr. Jacobs, of Brussels. She had profuse purulent leucorrhea, hypogastric and lumbar pains, and painful defacation, but micturition was not affected and the period not particularly painful. There was a tumor to the right of the cervix, and deposit in Douglas's pouch and to the left of the cervix. The sound could not be passed beyond the stricture. Dr. Jacobs's diagnosis was "right peremetritis and cystic salpingitis, complicating purulent endometritis with uterine stenosis." Abdominal section was performed; the tumor proved to be a suppurating broad-ligament cyst: the tube was occluded at its abdominal end, and contained mucopus, but was not dilated. The right ovary had undergone sclerocystic degeneration. There seemed to be total absence of the left tube and ovary. The patient recovered. Cittadini observes that whatever might be the precise relations of the stenosis to the disease of the appendages, it is certain that the cauterization caused the stenosis.—Brit. Med. Jour.—Med. and Surg. Reporter.

UTERINE HEMORRHAGES.

Terillon says that when a woman less than twenty-seven or thirty years of age suffers from hemorrhages she will not have fibroids, but rather should one think of an abortion, so often passed unrecognized, a salpingitis or a hemorrhagic metritis. It is exceptional to meet with an epithelioma. From 35 to 40 years the causes of hemorrhage are many: fibroids, epithelioma or sarcoma. polypus, metritis, abortion or salpingitis. Here diagnosis is more difficult. It is often impossible to recognize small interstitial myomata and small endo-uterine polypi. In all cases examination of the blood lost will furnish important information. In hemorrhages due to fibromata or salpingitis, the discharge is almost pure blood. In cases of epitheliomata or fibromata undergoing degeneration, the blood is mixed pus and mucus. Besides, there is in the meantime, during the intervals between the hemorrhages, a watery discharge mixed with yellowish clots, which leaves a brownish stain upon the linen. These spots upon the linen yield important results; if the hydrorrhoic fluid has a fætid odor peculiar to itself, then the diagnosis of epithelioma is quite certain. In sarcoma this odor appears late,

After the menopause the cause of hemorrhage is nearly always intra-nterine. A more or less periodic discharge takes place, which leads the patient to think that her periods have returned. In nine cases out of ten physical examination will reveal the presence of a sarcoma or epithelioma. One should not forget, however, to keep in mind ovarian cysts developing late and an old fibroid retrogressing.

As a treatment he recommends: Repose in bed, with pelvis elevated. This simple measure alone sometimes causes the flow to cease. Hot water has a hemostatic action, and injections may be given either intra-nterine, when the cavity is dilated, or simply into the vagina. The water injections may contain an antiseptic. If this fail, then tampon. Hypodermic injections of morphine or rectal injections of opium as well as ergotin subcutaneously may be used. One hemorrhage leads to another, thus producing a state of artificial hemophilia. In patients who suffer from uterine hemorrhages, one should advise exercise in the open air, douches, friction of the entire body and salt-water baths. Sun baths are used in Russia. The patient lies in an arm-chair, covered with a black cloth, the head protected with a parasol. This causes profuse sweating, the hemorrhages cease and the general nutrition improves,—Am. Gymaco Journal.—Gaillard's Med. Journal.

ANCIENT TEACHING OF PHARMACY.

In a scholarly history of medical education from the most remote to the most recent times, by Dr. Theodore Puschmann, Public Professor in Ordinary at the University of Vienna, the author affords a glimpse of how pharmacy was taught in the mediæval ages.

Opportunity was afforded for the study of medicinal plants in the gardens adjoining many of the monasteries. Many doctors, moreover, laid out gardens of this kind, as Matthæus Sylvaticus at Salerno, and the Magister Walter in Venice, to whom the Senate assigned a site for the purpose. But the universities at this early period did not yet possess this valuable aid to teaching, and the knowledge of medicinal plants was chiefly communicated by theo-

retical teaching and by books which were sometimes embellished with botanical drawings. The students learned how to recognize drugs and how to prepare remedies in the dispensaries, which arose in all the larger towns from the thirteenth century onwards. Stanpeis recommended students and young practitioners frequently to visit dispensaries with this object. Felix Platter narrates "that, in addition to continual studying and attending of lessons in Montpellier, he made a frequent practice of observing the preparation of all kinds of medicines at the dispensary," and he collected many herbs which he "neatly" wrapped in paper.

The apothecaries got the greater part of their drugs from abroad, and a stirring trade developed in these articles in the middle ages, traveling from the east through Italy. In addition to medicaments, the apothecary shops contained other articles for sale, as various spices and aromatics, wax candles, paper, sugar and sweets; in many places, especially in Germany, the apothecaries carried on at the same time the trade of ginger-bread bakers, and were bound to send every year in Lent, as a present to the councilors, all kinds of dainties. A contract dating from 1424, in which an apothecary undertook to supply the necessary medicaments for the Ducal Court at Este, gives us information concerning the drugs which at that time were kept in store in the dispensaries and were chiefly used. This information is supported and completed by certain statements made upon the contents of a dispensary at Kosel, in Silesia, in 1417, and upon the drugs and medicaments which the apothecaries and in Frankfort-on-the-Main sold in 1450. Certain drawings in the Dresden Codex, and in various early editions of medical works, give a clear picture of the arrangements of the dispensaries of that period.

The apothecaries in Italy and France as early as the thirteenth century formed confederacies, which framed their own laws and kept a strict watch to see that their rights were not encroached upon. In Germany the first apothecary shops are said to have been erected in Wetzler in 1233, at Scweiduitz in 1248, at Würzburg in 1276, at Augsburg in 1285, at Esslingen in 1300, and at Frankforton-the-Main in 1343. In the fifteenth century, not only every considerable town, but many also of the middle-sized and small ones, had apothecary shops, as, for example, Znaim, Pressburg, Krems, Budweis, Olmütz, Brunn and Kuttenberg. The education of the

apothecaries was that of men training for a handicraft. The works of Nicolaus Myrepsos, Nicolaus Praepositus, Christopher De Honestis, Saladin of Asculum, Quiricus De Augustis, and others served chiefly as the text-books.—Bulletin of Pharmacy.

PUERPERAL FEVER.

In puerperal fever we have an invasion of the system by septic material. It is septicemia with the puerperal condition superadded. How is the septic process kept up? There are three principal sources or distributing points of infection in the recently-emptied uterus.

- 1. Decomposing blood-clots at the placental site.—Where the placenta was attached is left a rough raw surface, often with adhering coagula; when the uterus does not contract well air enters the cavity and putrefaction takes place.
- 2. Retained fragments of the secundines.-A portion of the enveloping membrane is sometimes turned off and left behind in the uterine cavity. Too great haste in delivering the after-birth is answerable for this accident in the majority of cases. The delay that sometimes elapses between the birth of the child and the delivery of the placenta is irksome both to patient and physician; a bad quarter of an hour. The woman is exhausted, the friends anxious, you want it over with, and the temptation to be precipitate may be hard to resist. Weary of waiting, the accoucher tugs at the cord, it gives way, he hooks his fingers round the placental mass or into its substance, and finally manages to extract it piecemeal. But the conservative physician resorts to no active measures, beyond the Crede pressure, until the placenta shows signs of emerging. He then turns the mass over on itself so as to give it a spiral motion, by which manœuver the after-coming membranes are twisted and cohere like a rope.
- 3. Laceration of the cervix.—A torn and ragged cervix offers an easy point of entrance for infection, particularly where, as is frequently the case, it is sloughing from the effects of long-continued pressure and traumatism. The tearing is at times so deep as to extend through the internal os and into the broad ligaments, absorp-

tion of septic materials in such cases can readily be understood. Lesions only of the perineum and lower part of vagina are not, as a rule, productive of septicemia.

How does septic material enter the blood? It is taken up by the lymphatics and venous sinuses. The higher up in the parturient canal the source of infection is located, the more virulent is the resulting septicemia. When the chief point of entrance is through a lacerated cervix only, the trouble is often limited to a metritis, and is more likely to be local and circumscribed. For the lymphatics of the cervix are not so numerous as those of the uterine corpus, and their action may be impeded by the inflammatory processes they themselves set up, as shown by Virchow. But the septic invasion that comes from a mass of foul clots in the uterine cavity is generally rapid and overwhelming, quickly producing parametritis and peritonitis and general systemic poisoning.

Virehow describes the severer form of the disease as "malignant internal purperal crysipelas." The lining membrane of the womb becomes softened and necrosed and covered with a yellow diphtheritic deposit. The ragged edge of the torn cervix are swollen and ulcerated, and the muscular and connective tissues of the whole parturient tract become edematous and undergo inflammatory changes which spread to the other pelvic structures and the peritoneum.

Treatment.—There is no condition in the whole range of medicine and surgery where bold measures are more urgently demanded or more likely to be erowned with success. Empty the womb of its accumulated filth. Put the patient on the table and scrape out the cavity with the dull curette. If done in time, improvement will invariably follow soon after, and the temperature fall several degrees. In this condition the womb can be scraped with impunity. That old dread of meddling with the puerperal uterus, though all the scenes in the drama of blood-poisoning were being enacted before his eyes, no longer withholds the hands of the obstetrician.

Submit the uterus then to the same surgical treatment that you would any septic cavity. Curette fearlessly the interior until certain that nothing detachable can possibly be left behind. If moderate hemorrhage follow, so much the better. Then flush the cavity with a stream of hot water through a bulb-syringe and inject four ounces of peroxide of hydrogen before withdrawing the tube

Repeat this flushing process twice daily. The reflex uterine irrigator of Dr. Howard Kelly, which I here show, is an excellent instrument for the purpose.

The medical treatment consists of strychnine, a thirtieth of a grain twice a day, and alcoholics; avoiding opium as far as possible. The best antipyretic is a five-grain powder of acetanilid.

I will, in conclusion, briefly recount the features of a case occurring in my practice within the past month. A young primapara was seized with puerperal fever on the second day, the temperature rapidly rising, till on the tenth day it oscillated between 104° and 105°. They then discharged the attending physician, a very competent man, and called me in. I found her in a muttering delirium, drowsy and sallow, with a pulse of 140° and temperature 104.4°. There was some swelling and tenderness over the abdomen. Visiting her later that day, the thermometer marked 105°. I procured an assistant at once to administer chloroform and placing her in Sims' position, scraped from the uterus two tablespoonfuls of foul clots and shreddy material. Both cervix and perineum were badly lacerated, and the whole generative tract covered with patches of white deposit. Taking a bulb-syringe, I passed four inches of its tube into the uterus and injected half a gallon of hot water, following it with four ounces of peroxide of hydrogen. In twelve hours the temperature fell from 105° to 101½°. This intra-uterine treatment was repeated twice a day. On the next day there was some febrile reaction, but two days after the temperature marked 991°, and her convalescence went on uninterruptedly thereafter.— W. H. Hays, M.D., in Pacific Medical Journal.

UNTOWARD EFFECTS FROM THE SALICYLATE OF SODIUM.

Dr. F. W. Mann reports in the *Medical Record* some remarkable psychical symptoms following an overdose of this drug. The patient, a laborer of German birth, required treatment for a subacute rheumatic attack, for which was ordered a mixture containing two drachms of the salicylate in four ounces of mint-water. This was to be taken in teaspoonful doses every second hour. Like

many other Germen of his class, the patient thought that the more rapidly the remedy was ingested the more speedily the cure would be accomplished; he proceeded to swallow the whole four-ounce mixture in the course of four hours As the result of this overdose the patient began to have hallucinations, especially delusions of persecution. During the evening of that same day he became so troublesome to his friends that they felt constrained to call the aid of the police. The patient had to spend the night in a cell. The expectation was that the man would be consigned to a lunatic asylum on the following day. The history of the excessive dosing with the salicylic mixture having been taken into consideration, the man was sent to a hospital. During the next four days the patient comported himself very much like a case of delirium tremens. Visual and auditory hallucinations possessed him. He refused all food, giving as his reason that he was soon to be hanged and that therefore it was useless to take nourishment. He gazed in a mirror and promptly struck it a blow with his fist, and broke it on account of the demoniacal visage which his own reflexion brought to view. After this physical restraint became expedient, and the man was kept in his bed. His attention was solely and constantly given to the thought of freeing himself from persecution and constraint. He was not coarse of speech nor rough in action. When spoken to he responded pleasantly. Respiration was not notably depressed, pulse 130. At the end of the 5th day the delusions gradually passed away and the man returned to his usual state of health. His rheumatism had disappeared also. The man will be more heedful hereafter to follow the instructions of his physician. Hallucinations are a not infrequent result of salicylism, but they have not been, as a rule, so long-continued as in this instance with an overdose of the drug no greater than that here reported.—Journal Am. Medical Association.

ASPIRATION FOR RELIEF OF VESICAL DISTENSION— IS IT ALWAYS PRACTICABLE?

Dr. Keyes stated that he saw the patient after aspiration had been attempted and failed. Percussion over the abdomen gave

flatness extending four or five inches above the pubes, and he was very much surprised that Dr. Fuller had not been able to reach urine. As soon as the patient was placed on the table, however, and before he had taken chloroform, whether from abdominal contraction or from some other cause, the flatness disappeared excepting over a very small area, and above that the resonance was tympanitic. Chloroform was administered, and without very much trouble an instrument was made to elude the false passage, and fully three pints of very foul urine were drawn off. The man was semi-comatose and a formidable operation was not justifiable. Dr. Keyes said that the only similar case he knew of was one reported, he believed, by Dr. Stein some time ago, excepting one in which he (Dr. Keyes) recently took out both lobes of the prostate; the two lateral lobes were enormously enlarged and jutted out into the bladder and rubbed against each other. In Dr. Stein's case there was considerable enlargement of the prostate, but it was confined to the upper part of it

Dr. Bangs considered the case reported by Dr. Fuller a very unusual one, He has seen a number of cases where there was retention of urine, with a false passage; whenever he has found it necessary to resort to aspiration, he has never met with the difficulty described by Dr. Fuller. Dr. Bangs inquired what the members thought of aspiration as a method of emptying the bladder; whether a bladder could be satisfactorily washed out by that means. He has often employed it to relieve temporary distress, but has never felt satisfied, surgically, until he had entered the bladder from below, or by means of a radical operation.

Dr. Taylor thought that aspiration was simply a means to be employed in an emergency, when it is impossible to enter through the urethra, to relieve vesical tension, and to allow the parts to adapt themselves to more successful manipulation by instruments later on.

Dr. Fuller stated that he had seen one case where aspiration was repeated forty-eight times. The urine remained sweet.

Dr. Keyes considered aspiration a misfortune in many cases, and thought that the less said about it and its possibilities the better. In the majority of case; if a sufficiently severe physical condition exists to occasion retention, radical measures are called for, and the excuse might as well be taken to secure drainage and relieve the

physical obstacles, unless, as in this case, there is a good reason for not doing so.—Dr. Eugene Fuller, at the New York Academy of Medicine.—Jour. of Cutaneous and Genito-Urinary Diseases.

ON THE EMPLOYMENT OF DRYING LINIMENT IN THE TREATMENT OF SKIN DISEASES.

The medicated use of gelatines, as recommended years ago by Pick, is admittedly attended with some discomforts, and is not altogether satisfactory. The gelatine has to be warmed up every time it is employed, to be immediately and very uniformly applied to the part—a procedure of some difficulty and sometimes involving not a little pain—and the rapidity with which it dries reduces the possibility of absorption of any drug incorporated in it to a minimum, as the film is not in very intimate contact with the skin. Pick now recommends gum tragacanth as a basis, substance which, in contrast to gum arabic, does not dissolve in water, but melts down into a sort of a syrupy mass, which may be very easily smeared over the skin, and which on drying leaves a thin, delicate and colorless film. He considers the following proportions the most generally useful

Gum tragacanth .	 							. 5	parts.
Glycerine		 		 	 			. 2	"
Distilled water									66

and denominates the basis thus obtained a linimentum exsiccans. It may be prepared with cold or hot water, but preferably with the latter, as a thoroughly antiseptic preparation is thus obtained, which is not only easily applied, but as easily washed off with a little tepid water. Its application gives rise to a sensation of coolness which is specially noticeable and gratifying when it is used to congested or inflamed skin. Its advantages over fats is that it is not greasy, does not spoil the clothes, does not disfigure, and no further dressing over it is necessary. Remedies which are soluble in water can be incorporated in the liniment by being first dissolved in water used for its preparation. Substances insoluble in water can be rubbed into the basis in a fine state of division with very

satisfactory results. Oily substances only alter its consistence and retard its drying to a perceptible degree when in very large proportions. Ichthyol, styrax, Peru balsam, oleum fagi, cadini, rusci, etc., may thus be used from 5 to 10 per cent. Insoluble substances, such as chrysarobin, zinc oxide, which precipitate, red and yellow oxide of mercury, iodoform, iodol, salicylic acid, etc., give the consistence of paste to the preparation if in large proportions, but without altering its characters, except perhaps by increasing the rapidity with which it dries up, and thus enhancing its value. The preparations thus obtained are very stable, and produce no constitutional symptoms, even when their local action is energetic. An advantage of these drying liniments claimed by Pick is that they are easily applied, and may be used in out-patient practice.— Viertelghar, J. Derm., June, 1891.

VC Med J (65) 29:369, # 5, May 1892 THE TITLE OF PROFESSOR AND DOCTOR.—Mr. Huxley, says the Lancet, though M.D. of Breslau and M.B. of the University of London, and the happy possessor of endless doctorates of all sorts, objects to the title of "Dr." Huxley. He can stand being called Professor, but draws the line at "Dr," which many men seem to value so highly. The Lancet seems to think it so very natural that so great a man as Dr. Huxley should not wish to be called "doctor." It strikes us as partaking a little of snobbishness. The truly great man will not be very much concerned whether the title usually given him is "Mr." or "Major" or "Dr." or "Professor." The Hon. Chauncey M. Depew bears the indignity of a doctorate genially, and does not complain when addressed by his title. There have been other great men who were called doctors; so let Dr. Huxley not worry lest he be occasionally thought a member of the unworthy throng. Or if he is really distressed, there is, we are told, a prospering organization in this city "for the suppression of the title of Doctor among medical men." Let him join their ranks.-Medical Record.

IMPERFORATE ANUS.

Toisnot, N. C., May 9, 1892.

Messrs. Editors North Carolina Medical Journal:

Dear Doctor:—I send you below a statement of my case of "Imperforate Anus"

On the 19th day of January, 1892, I was requested by a negro man, living about one mile from my office, to examine his infant, a male, which he said did not seem to be doing well.

I found the child suffering from nausea—abdomen very much distended, and there were straining attempts to evacuate the bowels. The parents told me that the bowels had not moved since it was born—4 or 5 days before my visit. I concluded to give an enema and made the arrangement for the procedure. No anus could be found, and of course the idea of injecting the rectum had to be abandoned. The entire space between the perineum and the coccyx was as smooth and seemingly as firm as the perineum itself. There were light-colored vertical, transverse and diagonal lines from 1 to $1\frac{1}{2}$ inches long where the anus should have been.

I made some measurements with my eye, and cut through the skin along the vertical discoloration, where I thought the anal opening should be, and struck the nail on its head. The gut was revealed and I thought the work was complete, but found on attempting to wash out the rectum, that I had only opened a blind ponch-formed by adhesion of the inner surfaces of the gut above and the formation of skin below. The pouch, I suppose, was large enough to contain a large-size hazel-nut. The adhesion, which was perfect and about 2 inches in length, was dissected out or broken up with an ordinary scalpel and my finger-doing the work through a rectal speculum. Bowels moved immediately after removal of the obstruction. Hemorrhage was profuse, and I was afraid that this alone would be sufficient to cause death. Reunion of the walls of the bowel was prevented by the insertion of a stick of castile soap and held in position by a T bandage. The bandage and soap were removed night and morning and the wound cleansed with tepid water. Small doses of Dover's Powder prevented troublesome attempts to empty the rectum. Healing was prompt and entirely satisfactory, and the patient discharged in a few days with

all the functions of the rectum fully restored. All this was done in the woods and by a torch-light, without an anæsthetic and no physician to advise and help, using the father's lap for a table and his strong arms to steady the patient.

W. P. MERCER, a country surgeon.

Antigalactagogue Action of Antipyrin.—Guibert has found that the lacteal secretion can be completely suppressed in from two to six days by antipyrin in daily doses of thirty grains or more, given in divided portions every two hours. After thus employing antipyrin in nineteen cases, it is regarded as harmless and of real service where it is desired to suppress the milk secretion.—Le Practicien.

BLACK SNAKEROOT FOR DYSMENORRHEA AND OVARIAN IRRITATION.—From the results obtained in a series of cases Dr. James Brunton (Practitioner, xlviii, 4, p. 265) concludes that actea racemosa (black snakeroot) possesses anodyne properties and may, with advantage, take the place of bromides and opiates for the pain of dysmenorrhea. In addition, the drug has a direct action on the uterns, increasing the menstrual flow when scanty. It is best administered in doses of thirty minims, thrice daily, beginning three days before and continuing throughout the period. It is sometimes useful in menorrhagia and metrorrhagia. Its action is almost specific when there are ovarian pain and nervous depression.—

Medical Progress.

Thoracocentesis.—At a meeting of the French Academy of Medicine, Diculafoy (L'Abeille Medicale, 1892, No. 18, p. 137) advocated the employment of thoracocentesis whenever the volume of fluid in the pleura furnished the indication. An effusion of 1800 c.mc. (three pints and a half, plus) marks the limit. Dyspnæa as an indication cannot be relied upon, for death may result from the volume of the effusion in the entire absence of dyspnæa. Diculafoy denied that thoracocentesis, properly performed, led to the conversion of a simple into a purulent effusion. He related that he had performed thoracocentesis almost four hundred times, without empyema developing in a single instance.—Med. Progress.

"I HAVE used Peacock's Bromides in my practice for some time, and I would not like to be without it; in fact, I do not know of anything that would take its place in nervous conditions.

Trufant, Mich.

J. T. KILBURN, M.D.

We beg to call the attention of the Medical Profession to Behringer's Muriate of Cocaine, which is the handsomest and purest preparation put on the market. Every conscientious physician should use it, as it has proven to give the best and quickest result.

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Respectfully,

Lewisburg, Pa.

PULASKI F. HYATT, M.D.

WE desire to call the attention of our readers to the new advertisement of Reed & Carnrick in this issue. This firm have spared neither labor nor expense to perfect their Infant Foods in keeping qualities by sterilization and by placing them in hermetically sealed containers. They claim that Lacto-Preparata, an all-Milk Food, for young infants, and Carnrick's Food, composed of half Lacto-Preparata and half dextrinized wheat, for use after six months of age, have now practically reached perfection in keeping qualities. Lacto-Preparata almost perfectly resembles human milk in character, composition and taste.

AFTER several year's experience with the "Three Chlorides," in my Gynecological and Obstetrical practice, I can cheerfully and conscientiously say that I am well pleased with its effects in Metritis and also in Sub-Involution, and in other conjected state of the pelvic organs. Its decided alterative action in absorbing plastic deposits is plainly characterized by its action, and its results are very satisfactory to me. I shall continue its use so long as I have such satisfactory results from it.

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D.,
GEO. GILLETT THOMAS, M. D.,

JACKSON & BELL, PUBLISHERS.

SINGLE COPIES, THIRTY CENTS. THREE DOLLARS PER YEAR.

No. 6.]

WILMINGTON, JUNE, 1892.

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M.D.,
GEO. GILLETT THOMAS, M.D.,

Number 6.

Wilmington, June, 1892.

Vol. 29

ORIGINAL COMMUNICATIONS.

DOES ORGANIC DISEASE OF THE HEART PRECLUDE THE USE OF CHLOROFORM IN PARTURITION?

By T. RIDGWAY BARKER, M.D., Demonstrator of Obstetrics in the Medico-Chirurgical College, Philadelphia; Out-Door Obstetrician to the Pennsylvania Dispensary.

[Read April 27, 1892.]

In entering upon the discussion of a subject of such paramount importance to mother, offspring and obstetrician, one cannot lay too much stress at the very outset upon the axiom that "A good remedy will fail of its effect if not properly administered." This fact must be kept uppermost in our mind if we would avoid fatal results, not due, however, to the employment of the agent, as some would make it appear, but to the lack of attention and care exercised in its

administration. That there is a radical difference between surgical and obstetrical anæsthesia (analgesia), goes without saying. If we consider for a moment the stages of anæsthesia, which differ only in the profoundness of the impression—first, sopor; second, stupor; and third, stertor—we cannot fail to notice that in analgesia one rarely has occasion to carry the effect beyond the first degree (sopor), while in the surgical variety we are obliged to advance beyond this and keep the patient in the second stage, or that of stupor, thus markedly increasing the gravity of the prognosis.

In this connection, let us devote a moment's consideration to the progressive effect of chloroform vapor upon the nerve-centers of the cerebro-spinal system, beginning, as it does, at the inferior extremity of the cord, sacro-lumbar, and gradually extending its paralyzing influence upward until it reaches and expends its force upon the medulla oblongata. These well-established clinical observations having been verified by physiological experiment, we are justified in putting them to practical use. What other agent, may be pertinently asked, can relieve—aye, abolish—pain so quickly and safely, yet leave reflex muscular contractility unimpaired, as chloroform? Ether and ethyl bromide have found favor with some practitioners, but neither can displace chloroform.

Fordyce Barker states in his writings: "I may say here that I have long regarded chloroform as the best and safest anæsthetic in obstetrics, and that since 1850 I have used no other."

The danger from the employment of chloroform in this department of medicine depends upon the carclessness with which it is administered than to any toxic effect inherent in it. The four cardinal points to be borne in mind when giving this anæsthetic are: (1) Plenty of pure atmospheric air; (2) liberation of a small amount of the vapor at a time; (3) attention to the respiration; and (4) frequent observations as to the force and frequency of the cardiac action. That the recorded cases of death have been due, in a great measure, to saturation of the residual air in the lungs to a fatal degree, can scarcely be doubted. A few deep, forced inspiratory efforts will quickly produce such a condition. Withdrawal of the agent under these circumstances cannot prevent the further entrance of the chloroform vapor into the circulation, for it already fills the air-cells. Nor will attempts at artificial respiration prove effectual, since but a small quantity of the residual air can be forced

out of the lungs, while that which enters fails to sufficiently dilute the vapor owing to the tardiness of diffusion. Let us not suppose, however, that, because we administer to the parturient female small amounts of the drug continuously, therefore no risk is incurred, for experiments directed to solve this important question go to prove that even small doses, when continuously inhaled, tend to produce dangerous, and at times fatal, cardiac exhaustion. Far different is the result when given intermittently, as is the unalterable rule in obstetrics Should we seek authority for the statement that the dangers from the careful administration of chloroform in labor are too insignificant to warrant its refusal, we have only to turn to the American System of Obstetrics to find therein the following: "The danger when chloroform is used only to the extent of mitigating or abolishing pain in childbirth is practically nil." Lusk, quoting from Bert's experiments, states "that chloroform might be intermittently administered for an indefinite period with safety." These remarks do not apply to its use in the third stage of labor, for, as is well known, after delivery of the child it is likely to occasion relaxation of the uterus, thus favoring post-partum hemorrhage.

Offering the above as a preface to my remarks on the judicousness of employing chloroform when the parturient female suffers from organic cardiac disease, it now remains for us to consider the effect of parturition upon this enfeebled circulatory organ, thereby securing a scientific basis for our conclusions. In the first stage of labor we find the muscular contractions confined to the uterine muscular layers and directed toward overcoming the circular fibers of the cervix, while in the second or propulsive stage, not only does the uterus exert its power to the utmost, but also the abdominal and respiratory muscles are brought into action by the will of the parturient in her efforts to expel the fectus. The diaphragm is forced down and its movements paralyzed by the female holding her breath.

The other respiratory muscles are likewise unable to act, and hence imperfect oxidization of the blood results. As a consequence, the cardiac movements are accelerated, greater resistance is met with in the pulmonary and aortic circulations. Moreover, a tendency exists to venous congestion, as evinced by the hue of her face and swollen veins.

Owing to the excruciating pain experienced when the head passes

through the cervix, the parturient is further tempted to make additional muscular efforts, which only augment the difficulties met with. Under normal conditions this strain is of such brevity that it cannot be considered of any importance, but when complicated by disease of the heart it is of far greater gravity. If the condition be one of fatty degeneration due to a previous peri- or myocarditis, resulting in faulty nutrition and enfeeblement of the heart's action, as evinced by weak impulse, venous stasis, confused and irregular sounds, anæmia alike of brain and other organs, with faintness and oppression on the slightest exertion, this interference with circulation and respiration may readily tax its powers too far, and so cause speedy death from paralysis. Here the conditions which pertain in surgical anæsthesia are absent. The indications present are to allay excessive muscular action and respiratory spasm which is threatening the over-stimulated heart.

To allow the female to continue such efforts is to permit her to commit suicide; to warn her to desist is useless when in such agony; while delay is likely to be fatal. How can we overcome this condition of nervous excitement? Can we accomplish it by the administration of chloroform? Yes; of the two evils, for we must acknowledge there is an element of risk in giving chloroform, we can only choose the lesser, and so promptly proceed by inhalation to relieve the accessory muscles of parturition of their strain. By the abolishment of pain we lessen the work required of the laboring heart, which, instead of beating at the rate of one hundred and forty or more a minute, may diminish in frequency to ninety or one hundred.

What has been said of fatty heart is equally applicable to conditions of hypertrophy and dilatation.

The equilibrium, if disturbed, is almost certain to result disastrously. That sense of fullness in chest and oppression due to bronchial congestion, if relief is not afforded becomes most distressing. The cyanosis from deficient aëration is greatly exaggerated, while the insufficient blood-supply to the brain causes syncope and may be succeeded by coma if the excessive reflex disturbance be not removed. Nor are the indications for the administration of chloroform materially different in the case of females in labor with valvular disease. Whether it be mitral in the young adult or aortic in the aged primapara the cardiac strain must be relieved if we

would save our patient. As is well known, all forms of valvular disease ultimately develop a condition of ischæmia on one side with corresponding low tension, while on the other side is stasis with high tension. While by compensation life may run on for years, yet, when the strain of parturition comes, it will soon be overthrown if precautions are not taken to prevent it.

Of what benefit will be our knowledge of the value of cardiac "physiological rest," as laid down by Fothergill, if we do not apply it under these conditions? We all appreciate the importance of securing "quietude of mind and body" when such pathological states exist. Then why not employ the quickest and safest means to obtain it by the inhalation of chloroform? If the danger is great from "active exercise-climbing mountains, running up stairs, lifting heavy bodies, and all kinds of exercise involving heartstrain"-how much greater, aye, how immeasurably so must it be when the parturient female forces, with the anguish of despair, every muscle to its utmost in her desire to deliver her child. From a study of chloroform anæsthesia in obstetric practice we have seen how it should be administered and how it acts. Surely none will deny that in its employment under these circumstances we act otherwise than for the best interest and safety of our patient. That one may not be charged with being a blind adherent to theory, one has only to turn for support and justification to the teachings of the late lamented Fordyce Barker, who states: "It seems to be almost accepted as an axiom, with both the profession and public, that the inhalation of chloroform is dangerous for any woman with disease of the heart. For more than thirty years I have been convinced that this opinion is quite erroneous, and I have so taught in my lectures and in former writings"

He goes on further to say: "I have seen several cases, complicated by dangerous heart lesions, which terminated favorably, as I think, solely from the use of chloroform."

Snow, likewise, is of this opinion: "In all forms of valvular disease," he says, "chloroform, when carefully administered, causes less disturbance of the heart and circulation than does severe pain." To quote from Championnière: "If," he says, "I recognized an organic affection of the heart, without pulmonary complications, I should rather give the woman chloroform than to let her suffer." Were further proof necessary as to the propriety of employing

chloroform anæsthesia, one might include among this group of clinical observers, Vergely, who expresses himself thus: "Diseases of the heart are not a contra-indication to the use of anæsthesia." Macdonald states: "In almost all cases of heart disease with labor chloroform has been given, and apparently with benefit, during delivery. If carefully administered, I think it cannot but be useful in all cases." Since such eminent authorities advocate its employment can we justify ourselves in refusing our patients the benefit and comfort this agent affords? What is the danger from chloroform compared to the state of exhaustion and collapse into which the parturient female will inevitably fall? If this heart is forced to the verge of paralysis from overwork and excitement, why shall we not use the means at our command to lessen that strain? Let us have a reason for the faith that is in us, and not hesitate to fearlessly employ extreme measures to overcome extreme dangers.

Chloroform by inhalation can and will, if properly administered, save the lives of parturient females, suffering from organic disease, when death seems imminent from over-stimulation of its ganglia through reflex nervous action. Organic heart-disease, then, does not preclude the use of chloroform in labor, but rather is a condition calling for its careful administration.

QUININE has recently been artificially reproduced by a species of transformation of cuprein, which is the alkaloid obtained from the bark of the remijia pedunculata, or cuprea bark of Central South America. It is mentioned here for no other purpose than that of general interest, for the discovery comes in one way some years too late, as at present the price of quinine is so comparatively reasonable that no incentive is offered to go out of one's way to produce the article other than from the cinchona barks. This production artificially, however, is another striking illustration of the marvelous results the synthetically inclined chemists of our day attain to. These chemists thought this construction out somewhat as follows: They knew cuprein formed definite crystalline salts; they therefore produced the sodium salt. Then the possibility of substituting the sodium in this salt by a methyl group gave them reason to believe that the resulting compound would be quinine. This supposition proved to be correct, and resulted in a triumph for their endeavors.-An Ephemeris of Materia Medica, etc.

"OUR MISTAKES."

Some years ago the late Mr. John Hope and I saw a patient suffering from intolerable pain in the testes. Both testicles were enlarged, the left as large as a goose's egg, the right slightly smaller. As the enlargement and sufferings increased, especially on the left side, we decided to remove that testicle. On doing so we found a healthy testicle encased in dense concentric layers of suet-like fat about ar inch thick. The relief obtained made the patient urgent to have the right testicle removed too, which was done with complete relief. Some months afterwards this man came to me again in a deplorable condition. His bcdy was emaciated, but the abdomen had become enormously enlarged and extremely painful. The abdominal swelling was uniform and dough-like on palpation and absolutely dull on percussion, without any evidence of fluctuation. His chief symptom was a mucous diarrhea over which remedies had but slight control. He died of exhaustion. On making a post-mortem examination, we found the enlargement was entirely due to the presence of hundreds of fatty tumors scattered throughout the folds of the peritoneum. The mesentery was a mass of them. They varied from the size of a pea to that of an orange, and each was composed of concentric layers of suet-like fat similar to that found around the testicles. The smallest were concentric as distinctly as the largest. The most remarkable developments were in the appendices epiploice, each of which extended into the abdomen like a large bunch of grapes studded with fatty nodules. We might, if we had had a similar experience, have divined from the testicular encasements the real cause of the abdominal enlargement; but, lacking this, I think it was impossible to make a sure diagnosis. But I must draw this part of my subject to a close, or I should like to have alluded to the difficulties which surround the medical man who is called to see a patient in the initial stage of any of the acute febrile diseases, especially of infectious diseases. If he speaks of his suspicion too soon he may find he has given needless alarm; if he hesitates too long he may be blamed for not speaking soon enough. A wary outlook, an expectant state of mind, and a knowledge of human nature, are all needed to save him from a false position. Lastly, the mistakes which occur in the treatment of disease may be divided into those

arising from a false diagnosis and those in which the wrong remedy is used where the diagnosis is correct. I need not say that, for the most part, a false diagnosis is the cause of most of our mistakes, but this has already been dealt with. With regard to the misapplication of the treatment when the diagnosis is correct, I may say this is often owing to the want of a true appreciation of the temperament and constitution of the patient, whereby we are led to give what is good enough for the disease, but bad for the patient. Let us ever remember, therefore, that we are treating patients as well as diseases, and what may, rigidly speaking, be the right thing for the disease is often the wrong thing for the patient. Take the case of tonics, such as iron and quinine. I know of nothing which has destroyed the confidence of patients, both in medical men and medicines, more frequently than the administration of these remedies to debilitated, anemic and phthisical patients when they were quite unable to bear them. How often do we see a patient in the early stage of phthisis suffering from the miseries of dyspepsia added to those of his disease. And yet we find such a patient is being treated by cod-liver oil, or iron and quinine phosphates, which only add still further to his misery. Or, again, take the case of anæmia in which the fault lies in a weak and irritable gastric membrane. Nine out of ten of such patients become considerably worse when treated by ferruginous tonics. Or, again, take the case of a patient recovering from an attack of gastric catarrh: to select the exact moment when that membrane will be able to bear a tonic, and decide what tonic to give it, is one of our most difficult problems. In early phthisis, in anemia, in the exhaustion of gastric catarrh, I rarely venture on any so-called tonic medicine, and prefer to give aids to digestion and sedative correctives until I am well assured the stomach will tolerate such remedies as iron, quinine, or cod-liver oil. I cannot help thinking these misapplications of the right remedy for the disease in unsuitable cases is the secret source of that skeptical attitude which many able men have assumed towards the beneficial action of medicines. In early life they expected too much, and blamed the medicine, when really it was its application which was at fault, and so they have lost faith. I, for my part, have an undying faith in the virtue of medicines, and I hope to live to see the day when mankind at large will accord to rational scientific medication the place it undoubtedly deserves to hold in its esteem.—Dr. Wm. Murray in the London Lancet,

MINUTES

OF THE-

THIRTY-NINTH ANNUAL SESSION

OF THE

Medical Society of North Carolina.

WILMINGTON, N. C., May 17, 1892.

FIRST DAY-Morning Session.

The Society was called to order at 11 o'clock by Dr. Thomas F. Wood, Chairman of the Committee of Arrangements, Dr. W. T. Cheatham, M.D., of Henderson, being in the Chair, and Dr. Julian M. Baker, of Tarboro, acting as Secretary in the absence of Dr. J. M. Hays.

The Convention was opened with prayer by Rev. Thomas H. Pritchard, D.D., pastor of the First Baptist church of Wilmington.

Dr. Geo. Gillett Thomas, of the local profession, then delivered the following

ADDRESS OF WELCOME.

Gentlemen of the Medical Society of North Carolina:—I am the delegated gatekeeper for the medical profession of Wilmington on this occasion, and I stand at the portals to declare to you that your presence in our midst brings us much pleasure. We are of your number, and it fittingly becomes us to tell the good people of this ancient and honorable borough the great worth of the organization your zeal has created.

There has never been a time in the history of the Society when the busy and hard-working physicians constituting its body corporate have not been earnestly strong in the promotion of preventive as well as curative medicine, and seeking to enhance the welfare of the many communities committed to their charge, and the growth and character of your membership, is ample testimony of the esteem in which this Association is held by the profession in North Carolina.

Recognizing your merits, and partaking of the general sentiment that you are among the chief guardians of our people and an acknowledged aid to the executive officers of the State, we claim that you deserve equal rank with the other learned professions; that you do such duties of mercy and loving-kindness as entitle you to a generous consideration as high as that accorded the learned jurist or the wise legislator. No community, then, can fail to realize that your advent into their midst is an event of note and one calculated to redound to the prosperity of those who are your hosts.

From all time, since the settlement of this section, there has been an unwritten law that the stranger and wayfarer seeking a resting place here, if he possessed the pass word that would make known his rights, should be courteously received in the borough. There are no people on the green earth whose generous souls are more alive to the rights of hospitality than the inhabitants of Wilmington. These are the customs handed down from the fathers and their descendants and those not altogether to the manner born, but thoroughly engrafted upon the ancient stock, have long gladly lent themselves to all these gentle courtesies. For they have made life among these hills of sand and savannahs abloom with flowers; like the one, white and pure; and like the other, full of beauty and redolent with pleasant memories.

There is a legend that no stranger to whom was given to drink of the water that flows from an old spring near by could ever forget the place, or divest himself of a lingering desire to return again to its people. The story is full of beauty. The spring in the growth of the town has been abandoned, but the essence of the story still lives in the genial warmth of people's hearts, and in the open doors of Wilmington's home to all who deserve to enter and be made worthy guests at the fireside. There are near at hand sources of recreation which we shall offer you leading to the enlivening breezes of the sea-coast, and landing you at the very edge of the great ocean.

For the timid, if such there be in this assembly, there is the still water and soft air of Wrightsville-great refrigerators in these hot days. For the more venturesome, the surf forever sings a song of invitation, and in its roll those of you who shall dare its waves will find exhilaration and delight. The cold winds of the winter are forever tempered by our genial sun, and in tone the long heats of the summer's day are made tolerable by the cool, sweet breezes that sweep in from the sea. To us this is the dear spot of the earth, and we offer its use to you during your stay, assured by our faith in it that it will regale you.

Gentlemen of the Medical Society of the State of North Carolina, in the name of the Wilmington Medical Society, and for the people of the town, I declace the gates to our home and hospitality not ajar, but wide open. To the inner courts I bid you welcome.

RESPONSE.

Dr. R. L. Payne, Jr., of Lexington, responded in the following words:

It has been made my pleasant duty, sir, to respond to the generous words in which you have extended to us the welcome and hospitality of your city, and yet, moved as I am by a host of varied and pleasing emotions, I find it impossible to choose suitable words in which to give expression to all the gratification which the North Carolina Medical Society can but feel because of such an openhanded, warm-hearted reception. To many of us, sir, this occasion is but the renewing of old pleasures, for once in each decade since its organization our Society has convened within your gates, and each time your citizens have striven to surpass all others in their manifestations of sympathy with the aims and objects of our Association and in their kindly care for our welfare and our happiness.

Those of us who for the first time are come among you have received the traditions of the fathers, and are filled with glad anticipations of pleasure and profit, already reaching a happy fruition in the joyful reunion of friend with friend and in the inspiration to higher and nobler achievement which spring up unbidden in every breast as we listened to your warm-hearted greeting and earnest God-speed. And yet, sir, I would not have you think there is anything of surprise mingling with our deep sense of pleasure,

for since the old colonial time Wilmington has been noted in history and in legend for her devotion to hospitality and many an olden tale of lavish entertainment is told of those who first laid the corner-stone of this grandest city of our grand old State. Indeed, sir, apart from mere questions of pleasure, we feel that we enjoy a distinguished honor in being your guests, for the people of New Hanover have always been leaders in all that is generous, noble and true; her sons have always led the van with those who resisted oppression in every form, and in the days when British tyranny ground down our people and would have rivetted her fetters upon us, none showed firmer opposition than this good old county of New Hanover. Indeed, in every emergency which has arisen in our country's history the people of Wilmington have always been in the front, ready to do and to die, to devote fortune and life to the cause of right, and so her sons have made themselves an imperishable record for all that we most admire in human endeavor and achievement.

That we delight, sir, to honor the memory of good John Ashe, of Cornelius Harnett, of William Hooper, of Edward Dudley, and of the many other illustrious sons of this good old city who have helped to shape the destinies of our State and our country, and we will not quickly forget how, in the dark days of the war between the States, when our people, moved by a deep sense of wrong, made war for freedom and for right; when our beautiful Sonthland was clouded with the smoke of battle and her almost every hill and vale bathed in the crimson title of life-blood poured out in her defense by her devoted sons, then Wilmington, true to her record, not only sent forth the pride and glory of her manhood to die in glorious strife, but once more, as in the old days of the Revolution, she is called upon to give aid in the councils of the new nation and her distinguished son, George Davis, brought lasting credit to the Old North State as Attorney General of the Confederacy.

But, sir, amid all your glorious record we point with peculiar pride to the names of three of Wılmingtou's physicians and declare that, for true heroism, for unflinching courage and steadfast devotion to duty, they deserve place among the heroes of the world. In the days when the dread scourge, yellow fever, came as a fell destroyer in your midst; when your loved ones were dying by the score; when desolation sat at the hearthstone and the wail of the mother-

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less babe found a refrain in the grief-stricken cry of the mother bereft of the love of her first-born, or the groan of agony wrung from the lips of the poor old father as he saw the son, the pride and joy of his life, fall a victim to the terrible, insidious foe, then, the physicians of Wilmington, true to the demands of their high calling, hesitated not for a moment, and while others were flying in search of safety, they cast their lives into the breach, and during all the dark days of the pestilence they stood undaunted at their posts fighting for the lives of your people. Men of Wilmington, you can find no nobler picture of self-abnegation and unflinching courage in all the annals of the ages. In the pride and pomp of wars; under the excitement of martial music; in the heat of battle, with soul athirst for glory, men charge undaunted upon the very cannon's mouth; rush eagerly into the very jaws of death, and, dying, win undying fame. This is a grand and glorious sight, but after all does this compare with the courage of him who fights "with the pestilence which walketh in darkness"? Go, watch the weary physician making his ceaseless round among the sick in time of the dread epidemic! All about him are flying from the terrible enemy; his martial music is the sad, sad groans of agony coming from the lips of the dead and dying; his only inspiration the love he bears his fellow-man; almost certain end to die "unwept, unhonored and unsung," amid the great mass of sufferers, and yet day after day he stands at his post fighting for humanity, with no thought of emolument, no hope of fame, with only his watch-word and duty as his battle cry.

I tell you, men of Wilmington, amid all your galaxy of great names, there are no brighter stars than our own revered Anderson, our own honored Dickson, our own loved and honored Thomas. Go, teach your children to revere their memories; go, deck the brow of the living and the graves of the dead heroes with laurel and with bay; go, write their names high in your annals of fame, and beneath the scroll inscribe in living letters, "These gave life and health for the lives of our city. But, sir, I beg your pardon, if, in the contemplation of those grand old heroes, whose life-work in your midst has left such a halo of glory about your city, I should have for the time being seemed forgetful of the happy duty of the hour. In the name of the North Carolina Medical Society let me once more express our most grateful thanks to you for the welcome

you have given us; for the encouragement vouchsafed by your interest in our work, and, in the name of my colleagues, accept our most cordial invitation to grace our sessions with your presence, when you will add strength to our deliberations by expressions of your wisdom.

The President then called the Society to order for business.

On motion of Dr. W. W. Lane, Dr. F. S. Martindale, of Staten Island, was extended the courtesies of the Society.

Drs. J. E. Michael, J. W. Chambers and E. Geer presented the proper credentials and were admitted to the sessions of the Society as Delegates from the Medical and Chirurgical Faculty of the State of Maryland.

Dr. Wood announced for the Committee of Arrangements that a daily programme would be printed, and that the Society was extended all the privileges of the building, including the gymnasium and the baths. He wanted the members to feel perfectly at home.

A communication was read from the officers of the Cape Fear Club extending the privileges of their rooms to the Society; also one from the Wilmington Library Association to the same effect.

Dr. W. W. Lane, Surgeon of the Wilmington City Hospital, invited the members to visit his Institution.

On motion of Dr. Bahnson, the thanks of the Society were extended to the officers of the different institutions and to Dr. Lane for their kind invitations.

The President then read the

PRESIDENT'S ADDRESS.

Gentlemen of the Medical Society of the State of North Carolina:—The distinguished honor conferred upon me at the Thirty-eighth Annual session of this Society, brings with it as your presiding officer the agreeable duty of extending to you my heartfelt and cordial greeting to this, our Thirty-ninth Annual reunion. The presidency of the Medical Society of the State of North Carolina, ever an honor upon whomsoever conferred, becomes especially so when spontaneously bestowed by the unanimous voice of the largest membership of the Society ever assembled in one meeting. To be thus honored arouses within me feelings of gratitude which a tongue inspired with silvery chimes of human thought could have no power to express.

Permitted once more to assemble in this highly favored commercial center, with its genial and salubrious climate, hospitable homes and courtly people, I feel assured all come with one common purpose, namely, the advancement of Science, the upholding of the honor and dignity of our noble Art, and the promotion of the good of our fellow man. In making a retrospective glance over the long list of addresses by my distinguished predecessors, I find almost every subject of medical interest has been discussed either directly or indirectly, from the times of remote antiquity down to the duties and functions of the present Examining Boards of the different States.

This last mentioned subject is one of vast interest to the medical profession and of far more importance to the people of the States, inasmuch as it was especially for their protection against incompetent and unworthy members of the profession, that the laws regulating the practice of medicine were passed. So far as North Carolina is concerned we have nothing but praise and congratulations to offer for the manner in which the law has been observed. The applicants for license, with few exceptions, who have been so unfortunate as not to be fully equipped to meet the requirements of the law before entering upon the grave responsibilities incumbent upon a practitioner of the healing art, have submitted with a grace worthy of the plaudits and emulation of all good and lawabiding citizens. It only remains for the loyal, prudent and conservative members of the profession, aided by an enlightened, intelligent and humane citizenship, unbiased by extraneous or fortuitous circumstances, to see to it that the law be enforced in the fullness of its letter and spirit, ever holding the scales of justice evenly poised that its good name be in nowise stigmatized, and we confidently predict that the time is not far distant when all opposition will have ceased, and the high standard of medical education in North Carolina will be the pride and boast of an enlightened and appreciative citizenship.

Inasmuch as a large number of young men of late years have been admitted to the practice of medicine in this State, and so many have become members of this Society, I shall direct my remarks in a line that perhaps may prove profitable to some of them at least, and should any of the older members fall within the range of my reflections, I hope they too will profit thereby.

The ultimate aim of all medical research is the treatment of disease. It is eminently proper that a medical man be generally well informed; but what is to be more devoutly wished for is that he shall be a skillful practitioner. It is quite possible to be the one without being the other. The combination is what we hope to see commonly accomplished. The tendency of recent teachings has been rather to produce the first, leaving the second quality to develope itself or remain in a condition of imperfect evolution as might fall out. We constantly hear it asserted that the highly educated medical men of the present generation are not more successful in practice than their less accomplished, but more practical, predecessors. Even members of the profession are to be found who gravely assert that the man under whose treatment they would place themselves if seriously ill is the old-fashioned general practitioner.

This, gentlemen, is a very serious reproach to all our recent advances in scientific medicine; to our modern instruments of precision in diagnosis; and also to our progress in rational therapeutics, with the vast list of valuable remedies added to our armamentarium in late years. In order to understand how progress in one direction may exist without corresponding advances in other directions, indeed, with a certain amount of retrograding in some respects, we must clearly distinguish between medicine as an art and medicine as a science.

We now have some precise notions about the rational consequences of valvular disease of the heart, and see why one set of consequences results from a defect in one valve, and why a totally different series of results follows imperfection in another valve; we have also made rapid progress in distinguishing the locality of disease in the brain from the various disturbances produced in it, according to the functions of the part affected; we have learned the important lesson that much of the disease of advanced life is due to a want of that compensatory equilibrium so necessary to a proper elimination of nitrogenized waste.

The relation of mental conditions to bodily derangements has dawned upon us in the ordinary diseases of the sane. Physiological inquiries in many instances have successfully pointed out to us the right direction of our therapeutic measures and lighted up areas that could never be successfully illumined by empiricism.

En passant, I will call your attention to some familiar illustrations of this. For instance, the treatment of angina pectoris by nitrate of amyl was the logical sequence of certain physiological inquiries as to the action of this drug, together with some very exact observations as to the actual condition of the circulation during the attack. The synthesis thus erected by Brunton and successfully applied in the wards of the Royal Infirmary of Edinburg is an excellent and most praiseworthy illustration of the power of well-conducted physiological inquiry in practical medicine.

Leibreich by experiment gave us chloral hydrate, an hypnotic of much value, to say nothing of analgesics, antipyretics and other valuable remedies that have been added by others following up the same line of inquiry and physical investigation. The stethoscope, the thermometer, the laryngoscope, the sphygmograph, the urinometer and cognate diagnostic aids have illuminated the field of diagnosis and enabled us to recognize diseased conditions with a certainty and precision hitherto unknown to the most skilled diagnostician.

The microscope has rendered most valuable service to medicine as an art as well as a science. In dermatology it has cleared up a whole class of diseases heretofore shrouded in mystery; in the recognition of many internal affections involved in apparently hopeless involution, it is simply invaluable as a diagnostic aid. In that division known as the science of medicine we believe we can say with pride and confidence that the magnificent advance is permanent, and not to be swept away by subtle theories or fanciful chimeras. In the art of medicine I apprehend that we cannot boast of such stable and magnificent advance. It is very true that our instruments of precision have become far more numerous; we have insensibly come to regard the information thus furnished as of primary importance; until the information derived from a careful collection of rational symptoms, from a cautious consideration of the general condition, has been awarded a subordinate position. In fact, I think we attach an exaggerated importance to one series of facts and place a subordinate estimate on the value of others: my observation is that at present physical signs predominate in the mind of the practitioner over the current rational symptoms to the detriment of the patient, and it may be to the discredit of the profession.

The general public cannot be expected to estimate as by any other measure than that of our usefulness. It is well for a patient to feel that his medical man is a gentleman and a scholar; that he is carefully trained in physical examination, and capable of constructing a skillful diagnosis; who has spent much of his time at the post-graduate or polyclinic, and perhaps added the observation of foreign schools to his home-acquired attainments; but, gentlemen, the essential, thing, after all, is confidence in his power to aid him when stricken and prostrated by disease or accident. Yes, the latter is our actual business and occupation in life; and it is here that success is most to be desired. Let us briefly review some of our actual work that will bear successfully the test of severest criticism You will bear with me for selecting matter for illustration which may seem commonplace because of its long familiarity; it is here, however, that most brilliant results have been obtained; we perform the longest and most excruciating operations without the patient feeling one pang of suffering; we give relief by hyperdemic injections of morphia speedily, efficiently, and with less of those undesirable after-effects, than we could before this invention, to say nothing of its value otherwise; we enable an injured heart to develope compensatory growth, and so, in many cases, preserve for years valuable lives, which only a few years ago must have soon been lost to us. By improved methods in facilitating nutrition we now rear myriads of children who but a generation ago would have swelled enormously the death-rate of those who die under four years of age. By a carefully selected diet we prolong for years the existence of the diabetic patient. The widespread use of antiseptics and disinfectants has worked a much needed reform in the relation to the arrest of the spread of disease, and in rendering our refuse less harmful. Indeed, there is much to render the progress made in the last forty years memorable in the annals of medicine as an art, as well as a science.

On the minds of some, both in the profession and out of it, there seems to be an established fear that there is something dangerous and unsafe in too much understanding of the nature of things, especially the nature of disease. To such it seems much better and safer to rest contented; that it is the best thing to do certain things under certain circumstances, without being too inquisitive or curi-

ous as to the how and why; in fact, they rather avoid being able to give a reason for the faith that is in them.

Those who search into the nature of things they stigmatize as impractical. If research has yielded positive information, and a law has been established, they call its elucidator a theorist. A theory, no matter how well founded, has to them something dangerous about it, and indicates unsoundness in its enunciator. Others, however, are ever anxious not only to determine the causa causans of all diseases, and even accidental troubles, but also the contributory causes, laboring under the belief that, if such knowledge be obtained, proper treatment will of necessity be the logical sequence. Many people, speaking of politics as the cause of breaking down, confound cause and effect, as also naming religion as a cause of disease, when, as a matter of fact, it is not the cause that constitutes the disease; the malady is constituted by the perversion that results from the cause. One may be exposed to cold and damp which may cause bronchitis, yet in this instance we would not be expected to treat the cause, but the effect; and a fall may cause a fracture of a leg or an arm, in which case the surgeon would treat the fracture and not the fall; causes produce troubles in organs or in functions, but the trouble alone constitutes the malady. These principles, I hold, are general and applicable to all pathology. Such leanings, gentlemen, have done much to retard the progress of medicine, and in many instances have decidedly crippled its usefulness.

The carefully acquired knowledge of one practitioner, however useful to himself and his patients, gives little or no addition to the general stock of information, because it remains individual knowledge derived from experience, which dies with its possessor because he cannot formulate it—cannot so arrange it as to bring it in the sphere of the cognizance of others. He can treat one complex case admirably from his previous experience of like cases, but he cannot enable another to treat such or similar cases. The knowledge exists, but not in a communicable form. If such experience could only be rendered available to others, a great step would be secured. Much of the advance of knowledge lies in the capacity of one generation to benefit by the experience of its predecessor, in the power to appropriate the information gathered by those who have gone before us, knowledge which we in our time should have

elaborated to those who shall come after us. Medicine is no exception to this rule-a man should not only learn for himself, but he should gather and garner for his successors. My remarks, as I have said before, are intended principally for the younger members of the profession. They especially have been pursuing a scientific education without anything like a corresponding acquaintance with actual practice, and pass into the ranks of the profession, and are brought face to face with the care and responsibility of grave and complex cases, without that aid and supervision from teachers and seniors to which they have hitherto been accustomed. It is a serious matter, both for the patient and doctor, to be thus abruptly introduced into the practice of medicine, with all its responsibilities, difficulties and anxieties. After having prosecuted successfully your collegiate course and received the degree of Doctor of Medicine, and then passed the fiery ordeal of the State Examining Board and secured its approbation, then you find that practice differs essentially from the examination-table. An examiner may temper the wind to the shorn lamb, and remember that a license or diploma only guarantees the possession of a certain minimum of knowledge, while in practice the most complicated cases are presented. Further, too, there is this difference: in the hospital the patient is simply a case of typhoid fever or some other disease; while in actual practice the patient is to a certain extent a patron, and the management of the case may exercise a distinct and powerful influence over the professional reputation and prospects of his medical attendant. Such a consideration alone is often sufficient to produce a certain disturbance of the intellectual equilibrium, and to interfere with that serenity so desirable for calm investigation and decision; induce, in fact, perturbation of a nature militating against perfect self-possession. So it is apparent that a patient is not merely a subject of interest as the victim of some morbid process, nor even as furnishing an opportunity for individual advancement merely, but he is an elaborate and interesting organism possessing certain definite qualities. In fact, gentlemen, he is a man. He is a being who possesses the attributes of humanity collectively, together with some variations which form individual peculiarities, and as such he should command the highest consideration, humane and scientific, from his medical advisor. However the medical man of the present day entering upon the grave duties

and responsibilities of his profession, can justly claim a higher and a better qualification for the work before him than those who have preceded him. The advanced state of medical science, the improved methods of teaching, and the high standard of attainment necessary before being admitted to practice, give him an advantage for usefulness and high distinction hitherto unknown to the medical profession of the State While other States have followed in the wake of North Carolina in establishing a higher grade of qualification before admission to the right, honor and responsibility pertaining to the practice of our noble art, we can say with pride that we are still in the lead with only one other, our sister and neighbor Virginia, close by our side. While we have so much for congratulation because of the elevated and scientific qualifications brought about by the untiring vigilance of the cultured and enlightened membership of this Society; what shall we say of the observance of ethical properties by the profession at large? This is a subject worthy of most serious consideration. There are many members of the profession, I am grieved to say, who fail to connect themselves with any medical society, nor will they enter into any mutual agreement of a professional character, lest they be constrained to observe those properties incident to honorable professional intercourse. These people seem to be possessed of a mental astigmatism and a moral strabismus, and it is to their professional idiosyncrasies and obliquities that I propose briefly to direct your attention. Probably there is no truer axiom in our language than "self-preservation is the first law of nature." Probably there has never been a nation whose civilization advanced to the construction of even a rude form of philosophic thought among its people, but has had current in its society an adage embodying, under some form, the same idea. One of the most powerful and beautiful arguments of antiquity endeavoring to prove the existence of a supreme intelligence in the creation of man, which has come down to us, is in one of those Socratic dialogues in which the different members of the body are considered with reference to their respective functions, each being shown to be so admirably adapted to the preservation of the integrity of the entire being. This primal law is so plainly delineated on the face of nature that it would be wonderful had it not been so commonly seen. But while we all admit this prime fact, the whole world does

not so clearly see its corallaries There are a thousand streams of human action, meandering through the shadowy coverts of the social life of the world, which, when traced up to their fountain, are seen to spring from this principle The great struggle for life is not that of the present living world alone, but in the ages of the past, as revealed to us through geological discoveries, traces of a universal war for existence are as plainly marked as in the living world of to-day. This instinct in man as the highest reasoning animal, exhibits itself under a somewhat different phase to the form of it developed in the brutes; for, after exhausting all natural aids, the principle of preservation causes him to appeal to the supernatural for assistance. That carter of classical fable, who, when his horse failed him, appealed to Hercules for help, is but a type of the actual man of the world of all ages, past and present. To this principle we owe the superstition of our nature, a superstition which, at one time or another, has infused itself into all three of the learned professions, and more particularly into our own, in which to-day perhaps a close scrutiny would show a few lingering traces. Until a few centuries ago the "Black Arts" were intimately interwoven into the fabric of medical practice so that it would have been perfectly in accordance with the spirit of truth to have paraphrased the inscription common over the door-ways of the Pythagorean Schools of Philosophy in ancient Greece, which read: "Let no one ignorant of Geometry enter here," and have inscribed over the arch-way opening into the temple of medicine: Let no one ignoront of Astrology enter here.

The doctor of the period commenced his prescription with an invocation to Jupiter, and the "split-foot B" with which we of to-day commence ours is but an astronomical sign of that planet somewhat distorted in its journey down to us through ages, as anyone can ascertain for himself who will take the trouble of consulting a modern quack almanae for the original sign. Then the apothecary gathered his simples according to rule, waning and fulling moon; then the physician consulted the twelve signs of the Zodiac, and prescribed and prognosticated as Taurus, Gemini or Cancer was in the ascendant; it was then, after having failed to cure by the use of such disgusting farragoes as would require some ingenuity in a physician of the present day to corceive, that the doctor would resort to prayers, charms and verses. If any of you

will consult the "Rosa Anglica of John of Galdesden," an authority of repute in the fourteenth century, you will find him full of these charming verses. But if we of modern times, living in an age a characteristic of which is that it is essentially material, can congratulate ourselves that necromancy is no longer a part of regular medicine, that the doctor of to-day is not expected to be a magician, that the familiarity with the "Black Arts" is not an integral part of the knowledge of scientific medicine, yet we in humility contemplate the fact that we have still to-day existing in our profession as "Black Arts" as any of a past age. It is true that they are not considered to belong to medicine proper; it is true that their practice is not considered characteristic of the true representation of modern medical scie ce, and it is also true that the practitioners of said arts are held in contempt and loathing by all true disciples of the heaven-born calling; but it is nevertheless as true that at this day and hour there are not a few who manage to have themselves classed with the true disciples, who in secret league with the spirits of darkness cultivate the modern "Black Arts" under cover with the greatest assiduity and skill. And, gentlemen, it is true that with such members of this Society whom I now address are in daily intercourse and are compelled to meet as equals and honorable rivals nominally certain devotees whose astute skill, whose dexterous pr ctice and successful manipulations in the line indicated render them worthy of high position in this dark department of medicine. The over crowded state of the profession, the want of moral training to resist the temptations which beset all of us in our professional rivalry, in our efforts at self-preservation, in our struggle for professional existence in fulfillment of the "first law of nature," is a predominant cause favoring a luxuriant crop of tares. In brief, the spirit of materialism which seems to rule the age has destroyed reliance on divinations, incantations and charms, but the same gross spirit has inspired a reliance on certain ingenious devices for gaining notoriety, and certain modes of acquiring the patronage of the world, which, while of an entirely different character, are infinitely more repulsive. Dr. John D. Jackson, of Kentucky, some twenty or more years ago, published a monograph reflecting severely on the then violators of the code of ethics. This monograph contains a letter ostensibly addressed by Dr. Solomon Michiavelli Sharp to Dr. John Charlatan Green, his

nephew. I will read for your edification some portions of this amusing, but bitter and painfully truthful, description of what he considered to be the most reliable means of obtaining practice:

"My Dear John:-Your epistle of recent date has been lying before me until now unanswered. You tell that to the time writing you have been unfortunate in the profession which you have chosen; the world, you say, does not seem to recognize your merits, and that you are neglected, while you see around you men whom you deem far your inferiors not only patronized, but in some instances taken up and much ado made over them; about which you seem much discouraged, and ask for advice as to the means to pursue by which most certainly to secure your business, appealing to me as a successful doctor, retired after forty years practice, to give you the benefit of my experienced observations. Now, my dear John, I must say in candor your failure is attributable to the defects in your professional ability, though as my sister's son and a chip of the family block, I do not doubt that time is all that is necessary to see you, of your own innate instinctive development, after awhile "flourish like a green bay," if not like a "cedar of Lebanon." I could predict this with certainty were it not that the blood of the Sharps has been crossed by the Greenes, which may hinder the development of your sharpness, yet I do not think it will prevent the final, th ugh it may be a little slow, maturation of the peculiar characteristics of the maternal side of your house. I have never yet known a true Sharp fail from lack of shrewdness or from neglecting to make the most of an opportunity, or to be hindered by modesty from boldly pushing his way on every occasion offering. The Greenes, I know, have always been more slow to appreciate their own merits, and I suspect you inherit something of their nature, but I have little doubt but that, after awhile, the opposite traits which you by right inherit will finally assert themselves. As I have before intimated, I attribute your failure to a want of professional ability, owing to the deficiency of your education."

Now, on this point I hold some views which are entirely my own, and they are these: The Shorter Catechism of our Church declares that "the chief end of man is to glorify God." If I were to make a medical catechism I would write first that the chief end of the doctor is to get practice. Machiavelli declares to his nephew what seems to be the guiding principle of a host of physicians, "that the chief end of the doctor is to get practice;" and he also says the chief way to accomplish this is by "honeyfuglin" the public. Machiavelli thus advises, and his advice is good, for many of you, I apprehead, see daily what its adoption accomplishes: "Push into practice at all hazards." "Recollect audaces fortuna juvat." "Study will keep you back in practice; skim the surface; be qualified with the formula prescribed; form is the chance, whether in law or physic; this is the business, the Alpha and Omega." When one complains of feeling unwell in your presence, be quick to prescribe, without charge, for it will bring its return." "Luck's all." "You are paid, go which way you will." "Make all the noise and bustle you can to make the town ring of you, that everyone may know there is such a physician; it signifies but little how this be done, so it is done." "Frequently put yourself in public print, and if you have an important patient under treatment, make daily reports through the press." "Stand on the streets and tell about your difficult cases, real or imaginary; this is very effectual." "Bend or truckle to the whims of your patient, and fawn upon and sooth man, woman and child, for this is a winning card." "Be, if possible, introduced into a hospital, or, if this cannot be accomplished, visit some noted medical centre, and on your return prociaim to all with whom you meet the wonderful knowledge you have obtained, and your business is done for, be your success what it will." "If your wife shoul | mind business in her way, it will increase yours." "Set up an equipage and buy books, one or two French and German would be well; be cautious about who can read them, lest you expose yourself." "Fashionable dress and gesture and manner of feeling the pulse are half the business. "Write a book of some sort on physic or religion; write so that no man can make anything of it." "I especially advise that you get acquainted and to cheerfully keep company with all old women, midwives, nurses and apothecaries, as you must look to business; the old ladies are the most subject to ailings, and will acquaint you with the same; consequently you are to make the most of it; and never neglect or make light of the least complaint; thus you will gain the reputation of being both careful and skillful; otherwise your care and skill may be suspected as well as your affections." "Ride or drive a peculiar horse, a calico horse or piebald mare, or a buggy with an excessive deal of red or green paint upon it." "Cultivate style and manner; drive over children and have your name in the papers, or, if desperate, lose a dog and then advertise your name in large capitals." When you go to church be called out frequently, come in late, leave before the services are concluded, or stand in the door-way, shake hands with all, and bow to as many as possible—it is very profitable." "Bob your head to every one you meet on the streets, shake hands, if possible, and hold the hand you shake a long time—it pays well." "If anyone ceases to employ you, go to him for an explanation, and let him know that your feelings are hurt." "It is time to stop; I have given the outline, sketched the field, and it remains for you to fill in the details; the list cannot be given entire; it is very valuable." "These devices invariably bring practice and their adoption costs little—only a forfeiture of character and respect!"

Dr. Jackson has omitted a few hints that are very valuable, viz: to drive persistently about the streets, especially on Sunday, and when the streets are crowded; call at private houses, ring the bell, and find after you enter you have mistaken the house; leave your slate at several drug stores, and employ some one to write calls upon them; subscribe to all charities, whether you pay anything or not; give small presents to all the children in the community, and at Christmas time give books and other presents largely; if a new preacher comes to town be quick to call on him and offer your services, and especially declare your cheerfulness to do the charity practice of his congregation—this pays well; if you are a member of the Church, see to it that the "church racket" is played for all it is worth; never let an opportunity pass to magnify your services; gravely inform your patients that it was lucky they sent for you just when they did, for it was by your timely arrival and puissant intervention that a mighty fever was prevented, "that the bellyache would soon have run into a typhlo-enteritis with intussusception, or the child's stumped toe would soon have become the worst kind of a case of sphacelated mortification"; lose no opportunity for displaying your instruments; if you have a finger or a toe to amputate, take with you your amputating pocket and gynecological cases, and a gallon of antiseptic fluid of some sort, and a large roll of dressing material-be a long time selecting the necessary instruments; you will thus acquire the reputation of being extremely cautious, besides being thoroughly equipped. Another art of value,

in certain cases, is to substitute a grave affection for a simple one in your diagnosis; call a sore-throat diphtheria, an ephemeral fever typhoidal, and so on to the end of the chapter, and you will acquire the reputation of being a good typhoid fever doctor, or great on diphtheria; speak confidentially to all with whom you meet of the grave responsibilities attending your many cases, obstetrical, gynecological or otherwise, and especially emphasize the precautions taken to prevent blood-poisoning; sigh heavily from over-work; congratulate yourself upon rescuing patients from the very jaws of death, whom doctors A. B. C. and D. had given over as beyond recovery; make a display of as much high-sounding technical phraseology as possible; be familiar with neurotic technology and the germ theory; learnedly discourse on le petit mal intellectuel, the movements en manage and the prodromal preepileptic syncopic vertigenous paroxysms; emphasize the importance of micro-organisms, autogenetic and heterogenetic, and bacteriological cultures, pathogenic and saprophytic, etc., etc.-it will tell, for the less the public understand it the more will they give you credit for wisdom and learning:

> "Comendant quod non intelligunt." "For the dull world must honors pay to those Who on their understanding most impose,"

A patient may unjustly become dissatisfied with his doctor, and imagine he has been neglected. Should you be called to such an one, that is not seriously ill, having been discharged by his doctor because it was both proper and safe to leave the case to nature, you will manifest much surprise, not only at the neglect complained of, but as to the treatment also; become anxious for his safety, be instant in your attentions, puke, purge, sweat, blister and scarify, and thus your impressions will surely be profound, and though the poor devil slowly emerges from bed in spite of your nefarious treatment, yet you are thereafter pretty sure to have a big name in the family, and the shadow of your competitor just as sure never again to darken your pathway to that house.

The electric battery, Cammann's stethoscope, the clinical thermometer and hyperdermic syringe have been made to play a conspicuous part in this miserable business. The over-credulous have beer made to believe that, with the stethoscope and thermometer, the doctor was not only competent to elucidate all internal troubles, but to determine what they are the day previously for dinner. I recall an instance in which a frightened and struggling child was forcibly held and brandy subcutaneously injected for a slight cerosanguineous oozing from an insignificant abrasion of the eve-lid. The whining impostor gravely informed the sympathizing parents that an artery had been cut and that the child was in imminent peril and rapidly sinking. This brazen and brutal fraud not only went unchallenged, but gave enthusiastic satisfaction.

If you reside in the country, join the Alliance and stand aloof from all medical societies and associations, speak of them as rings and cliques of oppression and extortion, with which you have no sympathy or fellowship. Let your motto be, "get practice, honestly if you can, but anyhow get practice." Finally, when you have obtained a footing in the community, act upon the principle that your patrons are your personal property, and never let an opportunity pass to put them under obligations to you; should any of them be taken suddenly ill, or an accident befall them, and another physician is called and relief has been promptly obtained, be sure to visit them and express your regrets that you were not notified; by no means endorse the treatment, although it was eminently proper; speak of it as being a very hazardous procedure, and with emphasis assert that it was laid down in the books as one of the "dont's in medicine," and that they had narrowly escaped a serious calamity.

The following, from a newspaper, explains itself:

"Doctor — has returned from Philadelphia, where for the past two months he has been taking a post-graduate course in medicine at the University of Pennsylvania, from which institution he was graduated twenty-seven years ago. While in Philadelphia the Doctor stood successfully several competitive examinations, and also attended daily the University, Blockley and Pennsylvania Hospitals, where upwards of 2,000 patients received treatment and made a special study of various forms of disease most commonly met with in this portion of the country, and their special treatment as practiced by some of the most eminent physicians and surgeons Many of the most important diseases incident to this latitude he has thoroughly familiarized himself with, and takes pleasure in offering his professional services to the public, feeling that he is better prepared for the successful practice of medicine."

Another card says:

"Doctor - offers his professional services to the citizens of R- and surrounding country. Many years of experience and familiar acquaintance with the science and practice of medicine enables him to give the highest satisfaction. Old patrons will find him still faithful, and new ones will receive every attention. Satisfaction guaranteed as to charges"

I have heard it said of doctors that they had become so brazenly desperate as to be mirch their professional escutcheon by asking for practice out-right, and at the same time under-bid their more worthy and more honorable competitors.

One of the most refined and successful methods for obtaining notoriety is to be found in medical literature. It is a notable and praiseworthy fact that medical literature is pregnant with valuable contributions by accurate observers and truthful reporters. However, we cannot overlook the fact that there are a few whose professional morale is overshadowed by that most direful idiosyncrasy, cacoethes scribendi, who write at all times and upon all subjects with an eye single to the advancement of self-glorification; and many head their articles with such an appalling array of titles that one becomes fatigued, if not alarmed, in reading the marvelous appellations of honor before he gets to the subject-matter. Much could be said of the professional obliquities practiced by some of the leading surgeons and physicians who have established private hospitals or retreats for the sick. Many of these gentlemen have taken deservedly high rank, not only for their medical proficiency and surgical skill, but also for their rigid observance of honorable professional deportment; while others seem to aspire to an equally high distinction for the violation of ethical proprieties in their dealings with their less favored but more honorable brethren who entrust patients with them because of superior advantages offered for some special treatment, surgical or otherwise.

I could continue the list ad infinitum, but it is time to stop, lest I worry your patience. A man who, by a dexterous application of the arts and means referred to cannot succeed in getting practice and retain his place as an honorable man within the fold of the regular prefession. For one to pursue such dishonorable 342

methods to secure patronage must of necessity in every respect become despicable, professionally dishonest, personally deceitful disreputable and treacherous

Gentlemen, perhaps you may think me rather hypercritical, and maybe withal something of a cynic, and therefore probably drew the scene with rather too heavy a hand, and yet we all can recognize some lines which, alas! are too commonly visible in any but well-organized communities. Though in localities in which no organization of the medical body exists, the large number of medical men may act in the same true spirit of the profession, and admitting that if there was no written code, that yet the true physician would carry out its spirit, just as the true gentleman would always be found acting in accordance with the spirit of the civil law, if even it was not the law of the land, yet, just as the necessities of society at large demand organic laws, so on the same principle is organization and a written code demanded by every profession, with the clergy, as with the military, it is indeed the fundamental rule of existence. The truth is, that, owing to human depravity, we are naturally a little mean, and are instinctively predisposed to be a little jealous each of the other. This is, when we analyze it, but an extension of the natural law of self-preservation beyond proper limits. Now, I think I may truthfully say that there is no more effectual way of suppressing this evil phase of our nature, in its multifarious disgusting forms, as we frequently see it cropping out in the folds of our profession, than by the accepted public acknowledgment on the part of the better portion of our profession of a written code. Let the public at large once be fully cognizant of our standard, and half the incentive to selfabasement will have been taken away; for they, the audience before whom we play our respective parts, can at once measure each of us by our own rules, and the most respectable part of society learns soon to look with disgust upon the tricks of the tradesman in the professional man. Sir Benjamin Brodie once said that "Medicine is a most noble profession, but a miserable trade!" Fully imbue society with this idea, and any over-pushing, grasping desire for the world's patronage, at the expense of honorable independence and the nobler feelings, or the sacrifice of the rights of others, and the violator will by the public as by ourselves be viewed with derisive contempt, and then, and not till then, will this hydra-

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headed modern Octopus of charlatanism, which stalks abroad at meridian sun, clothed in the habiliments of a divinely inspired vocation, while within is a charnel-house of professional depravity, from which emits an insufferable stench, equalled only by the foul and loathsome effluvium that emanates from that filthiest of all places on the habitable globe, 'The Black Hole of Calcutta,' not only be shorn of its tentacles, but be buried beyond the hope of resurrection, so that neither man nor angel will ever roll the stone from its tomb again. The foundation of all pure ethical principles is in the golden rule, 'Do unto others as you would have them do unto you,' and its spirit has breathed into all the established rules for professional intercourse with which we are acquainted. It permeates the noble principles of that prince of surgeons of five hundred years ago, Guy, of Chauliac, who summed up the character of the true surgeon by saying that 'He should be courteous and condescending, bold in security, cautious in time of danger, avoiding impracticabilities, compassionate to the infirm, benevolent to his associates, circumspect in prognostication, chaste, sober, pious and merciful, not greedy of gain, no extortioner, but looking for his fee in moderation, according to the extent of his services, the ability of his patient, the result of his treatment and a proper sense of his own dignity."

And now, in our own code of ethics written by the ever-to-behonored Percival, and adopted by the American Medical Association and by this Society, we have as perfect a system of rules for our government, founded on as pure a sytem of morality as the most rigid moralist could ever wish for, a code which, from its essential nature, must always purify and ennoble those living in accordance with its precepts. How men of our profession, of good sense and good intentions, can ever live and practice their vocation in the same community without being on good terms with each other, is not easily explicable, for there is certainly no other profession, the inherent nature of the practice of which so inevitably and so repeatedly demands cooperation and mutual kindly services. As has been said by one of eminence in our profession. "If society does treat the medical man harshly and unkindly, is it any worse than medical men treat each other? Many of the worst things ever said of a physician originally came from another physician's tongue." It would always be well for that man who should be

ready to rejoice at the mishaps of his neighbor, and dishonorably profit by his misfortunes, to reflect that, being human, we are all thereby fallible, and that the day may not be far distant when he himself may stand in sore need of and most wistfully crave all human sympathy; and furthermore, that he who does injustice to one of his peers, directly wounds his profession, and reflectively himself, but as the organization of individuals into communities is greatly auxiliary to individual effort, whether it be for the furtherance of material interests or the practice of the moral virtues, so is our profession benefited by the formation of societies, certainly one of the most powerful levers impelling the advance of medical science during the past thirty years, has been the establishment of the numerous medical societies which during that time have grown up in Europe and this country. Before these every alleged discovery with any pretentions to importance is brought up, and undergoes the ordeal of scientific discussion by the ablest minds of our profession. Before these a thousand pretentious theories which would have lived some time in the world, have promptly received their quietus; and it has been, on the other hand, through its ventilation here, that many an opinion or method which would otherwise have been slow of development, has at once obtained its proper standing with the profession. The great medical societies of the world are the winnowing machines of the profession, serving the most useful purpose of sifting the good from the bad, the true from the false. Let the medical societies of Paris, Berlin, New York and Vienna be blotted out to-day, and the loss would soon be sensibly felt by the profession throughout the world. Is there a member of this Society present to-day but will agree with me in affirming that, as an individual practitioner, he has been instructed and elevated morally as well as mentally from the united association. And furthermore, I believe I speak the truth when I say that, as a result of the Society's organization and operations, our profession, and as a consequence we, as individual practitioners, have been elevated an hundred per cent. in the eyes of the respective communities in whose midst we belong. What, gentlemen, are our prospects for the future? Has our Society reached its acmé of efficiency, and is it reasonable to expect the fruits of the years before us to excel the products of those of the past, while acknowleding that there remains a wide margin for improvement.

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It has been justly said, "A very large class enter the learned professions with no higher motives than such as characterize commercial enterprises, pursuing them as a business, and more anxious to erect monuments like that of Nebuchadnezzar in the plain of Dura, than such as fill the niches of fame.

'Make sordid wealth the object and sole End of their industrious aims.'"

But, gentlemen, though we know that, while we have our own, with perhaps many other hungry mouths to fill, we must ever instinctively feel that to derive an income from our professional labors must be one of our first objects, an object the worthness of which we have sanctioned by the inspired authority which tells us, "He who provideth not for his household is worse than an infidel;" yet we should not forget that we have it from the same authority that "Man shall not live by bread alone."

Dr. George B. Wood once declared that "He who enters the medical profession with a mercenary spirit will almost necessarily come short of its highest requirements. Aiming at the appearance rather than the reality of skill, he will think more of the impression he may make on others than of a proper understanding of the disease! The immortal Sydenham used to say, "I have thought it a greater happiness to discover a certain method of curing the slightest disease than to accumulate the largest fortune." The illustrious Fothergill once said, "My only wish was to do what little business might fall to my share as well as possible, and to banish all thoughts of practicing physic as a money-getting trade, with the same solicitude as I would the suggestions of vice or intemperance." Lord Bacon has said that "Every man is a debtor to his profession from the which, as men do of course seek to receive countenance and profit, so ought to endeavor themselves, by way of amends, to be a help and ornament thereunto." Our code makes the same acknowledgment in the paragraph which declares that "Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to the extent of his best abilities to maintain its dignity and honor, to exalt its standing and to extend the bounds of its usefulness."

The plain truth is that those who intrust themselves to our care

have a right to require of us a knowledge of our profession fully up to the advances of the day, and for the lack of the possession of such knowledge, involving human life and health as it does, we stand responsible before God and in the presence of the law.

In conclusion, gentlemen, we ought always remember that "of unity cometh strength," and that, as whatever of individual honors come to us are reflected upon our Society, so as individual members composing the Society, whatever of honors or glory cometh to her, is reflected back upon us. And now may I say, in the name of every member here present to-day, that of whatever of joy or sorrow the future may bring to us, nerved to a triple resolve by the recollections of the past, may the future always find us true and worthy worshippers at the altar of science, ever lending the best powers of head, heart and hand toward adorning and keeping clean the niche in the great temple of medicine which has fallen to the lot of the North Carolina Medical Society.

Since our last meeting the icy hand of death has invaded our ranks and plucked some of our loveliest blossoms. Drs. Edmond F. Ashe, Abraham Van Wick Budd, R. L. Beall and others are no more. To us they were true and tried men, faithful to every duty; wore the honors of their profession with uprightness of character, gentlemanly deportment and honorable proficiency. Beloved in life and lamented in death; they have passed to the mysteries beyond, and are resting peacefully upon their laurels won and worthily worn during life. While we drop the tear of sympathy and sorrow for our loss, let us resolve to imitate the example of their noble and unselfish lives, follow their precepts, embalm their virtues, and indelibly stamp them upon our memories and characters.

On motion, the address of the President was referred to the Committee on Publication.

Committee on Finance.

The President appointed as the Committee on Finance, Drs. M. P. Perry, D. T. Tayloe and S. D. Booth.

Committee on Credentials.

The following were announced as the Committee on Credentials: Drs. Thos. S. Burbank, Albert Anderson, W. C. Galloway and I. G. Riddick.

Resignation of the Secretary.

The Secretary then read the resignation of Dr. J. M. Hays as Secretary.

On motion, the Society accepted the resignation of Dr. Hays, and extended to him their thanks for the efficient manner in which he had attended to the duties of his office.

On motion, the morning session then adjourned.

FIRST DAY-Afternoon Session.

The Society was called to order by the President at 3 o'clock.

The Committee on Credentials made a partial report, which was adopted. (The reports of this Committee will be given in full in the proceedings of the last day.)

Delegates from Randolph County Medical Society not Accepted.

The credentials of the delegates from the Medical Society of Randolph County were presented, but it being ascertained that the said Society had failed to comply with the Constitution of the State Society, the delegates were not admitted as such.

Dr. J. W. Long, one of the delegates, explained that in his county the profession took but little interest in Medical Society matters, and that they had effected the organization of the County Society for the purpose of stimulating their interest in this kind of work. Their Society had been organized on the line of the State Society, but he confessed to ignorance of the Constitution of the State Society in regard to county societies.

Resolution to Amend the Constitution—Baker.

Dr. J. M. Baker offered a resolution to amend the Constitution in regard to the appointment of the chairmen of sections; that the Secretary be empowered to appoint essayists within thirty days after the adjournment of the Society, to prepare papers on subjects named by the Secretary, and that these essayists report to him at least sixty days prior to the meeting at which their essays are to be presented to be used by him in preparing a programme.

In offering this resolution Dr. Baker said that this plan had been

adopted by nearly every society in the United States. In answer to an inquiry, he explained that this plan gives the Secretary the arrangement of the programme for the next meeting.

The question arose as to whether action should not be deferred until the next meeting of the Society, on the ground that the resolution involved a change in the Constitution of the Society.

Some discussion was entered into which resulted in the ruling of the President that it did involve a change in the Constitution, and should lay over to the next session.

Dr. C. M. Poole offered an amendment to the Constitution concerning the dropping of names of members for the non-payment of dues. Attention being called to the fact that a committee had been appointed at the last meeting of the Society to codify and revise the entire Constitution and suggest a substitute for the whole, and that all of the matters had been considered by that committee in their report, he withdrew his resolution.

Vacancies Filled on the Board of Censors.

The President appointed to fill vacancies on the Board of Censors, Drs. H. T. Bahnson and W. J. Jones.

Communication from the North Carolina Pharmaceutical Association.

The Secretary read the following communication from the North Carolina Pharmaceutical Association:

> NORTH CAROLINA PHARMACEUTICAL ASSOCIATION,) OXFORD, N. C., May 17, 1892.

The Medical Society of North Carolina:

GENTLEMEN: -At the last annual meeting of our Association, held at Morehead City, July 8-9, upon solicitation of the Committee which you sent there, and that the fraternal feelings which had been established between the two professions might be continued, the following delegates were appointed to this meeting of your Society: F. W. Hancock, of Oxford; W. H. Green, of Wilming ton; John H. Hardin, of Wilmington. It was further requested by your Committee and endorsed by your Association, that such delegations may be sent, annually, from each of the two organizations to the meeting of the other.

Yours, very truly, F. W. HANCOCK, Secretary.

Dr. S. D. Booth thought it would be well to hear the report of the Committee appointed at the last meeting of the Society to confer with the Pharmaceutical Association before acting on the communication. He then presented the following

Report of the Committee Appointed to Confer with the North Carolina Pharmaceutical Association.

He said that on his way to the Druggist's Convention he found much objection among the druggists to consider the matter at all. They seemed to think that we were encroaching on their rights; but at the Convention he found the druggists very pleasant and the Committe were treated very courteously, while the druggists seemed inclined to do everything that was right in the matter. He had suggested to them that the two bodies send representatives each to the other, and that this change of ideas would accomplish good.

The report of the Committee was received.

On motion, the communication from the druggists was received and the delegates were invited to seats in the sessions of the Society.

Dr. K. P. Battle read a paper on Hypertrophy of the Third or Pharyngeal Tonsil—Adenoid Vegetation in the Naso-Pharynx in Children. [See July Journal.]

On motion, Dr. Battle's paper was referred to the Committee on Publication.

Dr. S. S Satchwell read a paper entitled Our Pine Forests as a Factor of Health. [See July JOURNAL]

The paper was referred to the Committee on Publication.

Report of Committee on Credentials.

The Committee on Credentials made a partial report, which was adopted.

Dr. Joseph Graham announced that he would present a specimen and read a report of a new operation for treating the pedicle in abdominal hysterectomy.

On motion, the Society adjourned until 8 o'clock.

FIRST DAY-Evening Session.

The Society was called to order at 8:30 o'clock by the President.

The Chair called for the report of the Chairman of the Section on Surgery, but there was no response.

Dr. W. J. Jones read a paper on Rectal Pathology. [See subsequent number of JOURNAL.]

Dr. F. W. Brown, the regularly appointed Leader of Debate, being absent, Dr. Thomas Hill opened the debate on the subject chosen by Dr. Brown—Puerperal Eclampsia.

He called it "this terrible disease—the most frightful that the physician is called upon to treat." As far as his reading goes, the cause of the trouble seems to be uremic poisoning with a condition of albuminuria. His idea of the treatment is that it should be prophylactic, and believes that we have a preventive for the disease in chlorate of potash given in 10- or 12-grain doses. He has had experience with it for thirty years, and thinks he has succeeded in warding off an attack, for he has used it in patients whose condition would lead him to expect the disease. The treatment during the seizure should be morphia and chloral. In reply to a question as to how he would treat a case occurring unexpectedly at the fifth or sixth month, he said that he would use opium and chloroform to break up the attack and then push the chlorate of potash. As to the rationale of the treatment by the chlorate of potash his idea was that it oxygenated the blood and freed the urine of albumen.

Dr. Booth thought the best thing to do was to bleed and bleed vigorously in every case unless he thought the bleeding itself would kill the patient. Then deliver by the quickest means in your possession, after which you will get good results from morphia. Give all the morphine she will bear to keep off the convulsions. He has not found that morphine acts well before delivery, why, he does not know.

Dr. Parris recommended the hypodermatic injection of veratrum viride. He cited a case in which headache for a few days was followed by convulsions. Dilatation having just begun, a soft catheter was introduced into the uterus and left in position. Dilatation was completed in a few hours and delivery effected. In about three hours the patient had a most terrific convulsion to which she nearly succumbed. Ten drops of veratrum was given, the pulse being 140. Within an hour the pulse was reduced to 40, whereupon sweating began, and the patient returned to consciousness. In about one hour the pulse began to rise again, reaching 120. Vera-

trum was again administered with the reduction of the pulse to 50, where it remained a long time. The administration of veratrum was continued during the night in smaller doses, and the patient finally recovered, and the success with this patient led him to regard the treatment favorably. This patient had had convulsions in several labors previous to this one.

Dr. Bulluck's experience had been that, while neither bleeding nor chloral had always checked the convulsions veratrum had. If you get the pulse under 55 the woman will not have convulsions, no matter what the physiological conditions are. You can use as much as 25 drops hypodermatically. He has been using it fifteen years and has never seen a case in which it failed,

Dr. Alston has had three cases in the last three months. He used bromide of potassium and chloral mixed together with slight bleeding. He called attention to the fact that we sometimes have convulsions when there is excessive hæmorrhage; in these cases we cannot bleed.

Dr. W. J. Jones thought we should look for the cause of the convulsions. Is it a reflex excitability? Is it a case of toxemia? He was not satisfied that albumin in the urine was the cause. We are directed to the kidneys as concerned in the production of the convulsions, and then we find albumen in the urine. That they may be due to improper elimination, he cited a case in which the mere introduction of the catheter gave relief. If the convulsions be due to improper elimination, we would not expect bleeding to give relief, but would rather look to restoring the functions of the kidneys, and of aiding their action by that of the skin and the bowel. After all the gateways are open for the elimination of the waste product we might give chlorate of potash. Use chloral and morphia to control the convulsions until you can get the effect of the veratrum.

Dr. Roberts, in his experience, had been weaned from the idea that the lancet was the first and only thing that would do any good. He delivers his patients as quickly as possible, and if he sees any evidence of convulsions he gives a brisk cathartic.

Dr. Pierce thought that blee ing should depend upon whether the patient were in a sthenic or asthenic condition. He called attention to the good effects of the bromide of potash with ergot. They are derivatives from the brain and excitants of the uterus.

bringing on contractions. Also recommended mercury in large doses on account of its derivative action. If the convulsions depend on uræmia, and there is much poison in the blood, you will not have time to eliminate it, and nine cases out of ten will die anyway.

Dr. McNeill, in several handred cases of obstetrics, has never seen a case of eclampsia. He thinks this is due to his frequent observance of the women whom he was to attend in their confinements. He thinks prophylaxis the most important of all treatment.

Dr. Haigh thought while the members apparently differed in their treatment of the condition under discussion it was all on the same line. He thought that the convulsions were due rather to reflex irritation, and that when the uterus has been relieved there is one great point gained, and the second point is to allay the nervous centers. He thought all the remedies good. He was interested in the use of veratrum, though he had never had occasion to use it. In those forms where the brain is seriously threatened it is without doubt, imperatively called for, and gives the quickest relief of any remedy. He called attention to those hysterical cases in which we see that the patient is in little danger, but in those cases in which the brain is threatened immediately after the first convulsion, there is stertorous breathing, and there will be a lesion of the brain unless there is relief. In these he has never seen a remedy to equal a good free letting of blood. He has had no cases of late years, and attributes the fact to his having adopted the prophylactic rule of the frequent examination of the pregnant women.

Dr. Payne, Jr., thanked Dr. Haigh for expressing what he had found true in his experience. He spoke of the diversified opinions as to the cause, and thought the practical point with us is as to the successful method of treatment. He recommended as a routine treatment to bleed and then use morphine and veratrum hypodermatically, and in the vast majority of cases you will succeed.

Dr. Chambers said that in several autopsies he had witnessed in which the cause of death was puerperal convulsions, there was no distinctive lesion in the kidney which would point to them as the cause of the trouble. He thought we were discussing a number of clinical conditions under the name of puerperal convulsions, and this accounted for the difference of treatment. He divided the disease into two classes—one gets well under any treatment. On the surface clinically they appear just as horrible as the other class that die regardless of any treatment. We are brought to face the fact that all diseases have a mortality that belongs to them whatever be the treatment.

In one of the autopsies there was a lesion of the kidney, but there was no more reason to say that the woman died of puerperal convulsions than any other patient who died with an acute nephritis. In the second case there was a normal condition of the kidney as far as the naked eye or the microscope could say. In the third case there was a marked congestion of the kidneys and the internal organs generally which could be accounted for by the fact that the convulsions had continued for several hours before death. these three women presented the clinical condition known as puerperal eclampsia, but there is a question whether any two of them died from the same cause. He cited a fatal case that occurred at the Maternity Hospital in which the patient received all the attention that is given to the patients in that institution. For a month prior to delivery the urine showed no albumen, nor was there any twelve hours after labor. She had a convulsion after labor which lasted eighteen hours, and immediately albumen appeared in the urine. He thought we should treat the patient and not the convulsions. It is impossible for one man to tell another just what he would do under a certain circumstance.

Dr. Herring, after losing eight cases consecutively, had obtained good results from large doses of morphia.

Report of Committee on Credentials.

A partial report was received from the Committee on Credentials. On motion, the report was received.

Committee on Nominations.

The Chairman announced the following members as the Committee on Nominations: Drs. J. W. McNeill, H. H. Harris, Thos. S. Burbank, W. H. Harrell and E. C. Laird.

The Secretary read an invitation from the Robert Portner Brewery Company for the members to visit their plant and test the quality of their beer. The Company were thanked for their cordial invitation.

On motion, the Society adjourned.

SECOND DAY-Morning Session.

The Society was called to order at 10 o'clock by the President.

Dr. Geo. G. Thomas offered the report of the Committee appointed at the last meeting to revise and codify the Constitution and suggest a substitute for the whole.

On motion the thanks of the Society were extended to the Committee, and they were authorized to have 300 (afterwards increased to 500) copies of the report printed for distribution, and action on the report was made the special order of business for the second afternoon of the next meeting of the Society. The motion was amended, requiring a copy of the report to be mailed to each member of the Society at least sixty days previous to the next meeting.

Report of Committee on Credentials.

The Committee on Credentials made a report, which was received. A telegram was read from Drs. Charles and Francis Duffy, expressing their regret at their inability to attend the meeting.

Report of Section on Gynecology.

Dr. M. H. Fletcher presented the report of the Chairman of the Section on Gynecology.

On motion, the report was referred to the Committee on Publieation. [See subsequent number of JOURNAL.]

The President extended the courtesies of the floor to Drs. Michael Greer and D. P. Bachelor.

Dr. Joseph Graham read a paper and presented a specimen on Supra-Pubic Operation for Removal of the Uterus with Sub-Peritoneal Treatment for the Pedicle.

On motion the thanks of the Society were extended to Dr. Graham, and his paper was referred to the Committee on Publication. [See subsequent number of JOURNAL.]

Report of Committee on Credentials.

The Committee on Credentials made a report, which was accepted On motion, the order of business was suspended and Dr. W. W. Lane read a paper entitled Hospital Notes, and exhibited two cases: one for removal of the entire upper extremity with scapula and a portion of the clavicle, and the other for supra-pubic operation for artificial urethra of three years standing.

The members were much interested in the cases, and the thanks of the Society were, on motion, extended to Dr. Lane, and his paper was referred to the Committee on Publication. [See subsequent number of Journal.]

Reports of the Chairmen of Sections on Materia Medica and Medical Jurisprudence.

The Secretary presented the reports of the Chairmen of the Sections on Materia Medica and Medical Jurisprudence, both of which were referred to the Committee on Publication. [See subsequent number of Journal.]

Report of Board of Censors.

Dr. W. H. H. Cobb offered the following report from the Board of Censors: "WILMINGTON, N. C., May 18, 1892.

"We are reliably informed, and know, that Dr. M. E. Robinson, of Goldsboro, N. C., a member of this Society, heretofore in good standing, has advertised, and is now advertising, in the local papers, a nostrum known as Garden's Chloride of Gold Treatment for Drunkenness, etc., and guaranteeing a cure; and whereas, such practice is in direct violation of both the spirit and the letter of the Code of Ethics adopted by this Society for the government of its members, the Board of Censors respectfully advise that the said Dr. M. E. Robinson be suspended from the rights of membership in this Society until such time as he can, after appeal for trial by the Board of Censors, purge himself from the odium of such dishonorable and unprofessional conduct.

"We also suggest that the same action be taken in the case of Dr. J. B. Robertson, of Winston, N. C., who has similarly advertised and guaranteed a cure for the same habits, known as Hertginger's treatment."

CONJOINT SESSION, WITH STATE BOARD OF HEALTH.

The hour having arrived for the Conjoint Session of the Society

with the State Board of Health, Dr. H. T. Bahnson, President of the State Board of Health, assumed the Chair and called the Conjoint Session to order.

Resignation of Dr. J. M. Baker ..

The Secretary read the resignation of Dr. J. M. Baker, which, on motion, was accepted.

A PARTIAL STOPSIS OF THE REPORT OF THE SECRETARY OF THE STATE BOARD OF HEALTH.

Influenza.

Since the last report of the Secretary the State has been visited by another spidemic of Influenza. It would be more correct to say that all during the year there were cases reported from some of the counties. For instance, in June, from Macon, Mitchell, New Hanover and Pender; July, Greene, Macon and Orange; disappearing in August, appearing again in September in Mitchell and Orange, the next month in Orange and Davidson. In November it set in again in earnest, being reported from 11 counties; in December it had reached 36 counties, mounting to 41 in January, declining again to 36 counties in February.

There are no statistics to determine the death-rate or the number of persons sick with influenza during the periods named. The reports from our towns do not specify influenza as a cause, as in the scheme so far adopted it seemed only practicable to name such diseases as gave indication of the general state of the public health. Without being able to appeal to statistics to demonstrate the loss to the State by death and disability, we know it has been great in hastening the death of old persons and impairing the health of those of middle age.

After having had three years experience with the disease, and the voluminous statistics of all nations—for none have escaped—the practical question to sanitarians is, *How can its spread be averted?* That it is an infections disease, has been clearly proven by the experience of the best observers, and in England this belief has been so firmly held that a person in a small town was fined for coming on the streets before he was entirely well of influenza. It must be admitted that, as much information as we have accumu-

lated upon the subject, there seems to be no practicable means of preventing or arresting it. The epidemics in towns have been traced to the arrival of one person from an infected town, but its spread is so rapid and mysterious, and the sickness may be of such an unnoteworthy nature as not to require the attention of a physician, or not to be distinguished from usual non epidemic catarrh.

As malaria formerly entered into nearly all of our diseases on the sea-coast and in the alluvial valleys of the interior all likely to partake of the malarial type, even surgical cases of a serious nature being almost uniformly dominated by this malarial poison, influenza seems to have asserted the same predominance, either communicating its type to all sickness, or attacking the patient at the most vulnerable point, lighting up rheumatism and gout, precipitating the consumptive in his downward course. While it has had no such destructive influence as the shorter ravages of cholera and small-pox, it has caused losses to towns, and especially to insurance companies and societies, in excess of that of any sickness which has visited the world.*

The domesticated animals have suffered but little from the epidemic in our State, even estimating that the uncertain word "distemper," as used by most reporters, may or may not mean influenza, few counties have reported its presence.

Consumption.

This disease still continues to be the most important one that afflicts the human race, because of its fatality and universality. In North Carolina we have nothing like the prevalence of the disease that is found in the States North, East and West of us, which may be accounted for in one way by the sparseness of our population and the mildness of our climate. We are speaking, though, as if we had valuable statistics to prove our death-rate, whereas we have only the records of from 13 to 15 towns with a population of from 80,000 to 100,000 to estimate upon.

^{*}This immense loss of money is less burdensome now than it appeared years ago, because it is now borne by insurance companies, and in the days of the plague, small-pox, by individuals, these great epidemics occurring before capital and brotherhood associations had ventured for profit and for philanthropy to provide for the widow and orphan.

The increased ratio of the death-rate among the negroes is still a striking feature. The causes of this disproportion lie deep in the social conditions of the negro, and the remedy is so far in the future as to seem now allbut hopeless. If contagion be admitted as a potent cause, none are more subjected to it than the negroes huddled in the suburbs of every Southern town in the numbelesome shanties. If syphilis, hereditary and acquired, can lay the foundation for it, the cause is abounding. But the tuberculosis of negroes is more largely abdominal than with the whites, so much so that tabes mesenterica was designated negro consumption par excellence by Dr. Cartwright

The negro has not become so important a social factor as to have become as interesting pathologically as he may be some day, and so all his diseases are not touched upon in the text-books. Even from Baltimore, which is nearly a Southern town, we have a new Practice of Medicine, and the word negro is not so much as mentioned in the index.

In the absence of more eleborate statistics, we are aware that death is playing havor with the freedmen, and that the massing of them in the town is a potent cause of all their constitutional diseases. In the month of March an insurance solicitor informed the Secretary that his company had paid in Wilmington a policy for every day in one week, and the report of Dr. Potter, Superintendent of Health of New Hanover County, shows that for March, 1892, the deaths from consumption was 4. There is no remedy applicable to this state of things like the return of the negroes to the farms, even if this be applicable. For the moment you discuss the question, the ways and means rise as insuperable obstacles There has been a removal of negroes from the eastern portion of the State, but the agents who solicited them as laborers for other States found that the town negro was too well satisfied with his easy life there to be beguiled into the turpentine forests of Georgia, the sugar plantations of Louisiana, or the cotton fields of Mississippi. The means are not obvious whereby the consummation of the seggregation of these great masses among the farming districts may be accomplished, but it will come in time, or the race is doomed to a large decline by disease, chief among which is consumption.

Vital Statistics of the Negro.

In "The Arena" for April, 1892, we have a thoughtful study of the vital statistics among the negroes. The writer was greatly embarrassed in his investigation of the question by the lack of statistics from the States. Since the days of the faithful statistician, DeBow, Superiatendent of the seventh census, no census has been so reliable, especially as to the negro, and the records of few Southern cities were kept regularly and systematically.

The wild conjectures about the immense increase of the negro population made by several contributors to statistical and political papers was contrary to our knowledge of the actual condition of the race. Mr. Frederick L. Hoffman, the author of the article in "THE ARENA" above-mentioned, tabulates the white and colored population of ten Southern States for 1890 from the census, showing the percentage increase among both races in these States. In the State of North Carolina, for instance, the increase among the whites for the past decade was 20.98 p. c., while for the negroes it was 6.76 p. c., two-thirds less. In Mississippi and Arkansas alone was the increase of the negroes greater than among the whites, while the total average reads, increase among the whites for the ten States 25.07 p. c., and for the negroes 18.29 p. c. Statistics are not at hand to inform us whether the exportation of negroes from the north tier of Southern States to Mississippi and Arkansas went to swell the ratio of increase.

But consumption among all the classes of people in North Carolina is a leading question, and one that we ought to meet with the aid of the large mass of facts which are being collected, with some increased degree of hope. The State sets apart hospitals for the care of the insane, not with positive despair about their future, but with a feeling that a peaceful death is the best solution of their sad estate, is it not worth the while for the State to show her interest in this great class of curable consumptives and open free sanitaria for an experiment on a large scale at the public expense, and so restore men now hopeless to their places as citizens. Private sanitaria in our State are attracting the attention of the people of the Northern and Western States, and are doing good work. Is not the experiment far enough advanced to encourage the State or philanthropists to undertake free sanitaria for these afflicted citizens.

A question has arisen as to the colonization of consumptives, if it is not unadvisable for the salubrious States fitted for the location of sanitaria to object on the ground of the implantation of the scourge by the massing of the consumptive in heretofore exempt localities. We believe this objection would not hold where such precautions and sanitary rules are adhered to as in the sanitaria. It is well known, though, that when a locality gets a reputation for its salubrity for consumptives, hotels and private houses are thronged by these unfortunate invalids, where hygienic discipline is impossible.

The prophylaxis of consumption is already a practical question, and is assuming a rational stage of practice, through the sanitary associations in the United States.

The American Public Health Association at the Charleston meeting in 1890 had its practical prophylaxis up for discussion, and the remarks of those who took part in the debate showed how seriously some of the leading sanitarians in the country were studying the question.

The Conference of State Boards of Health which took place in Washington in May, 1891, reported through their committee some resolutions bearing upon the practice of prophylaxis, as follows:

- "Gentlemen: Your committee begs leave to report the following resolutions:
- "1. That it is the opinion of this Conference that tuberculosis is a zymotic disease; that its germs are developed within the blood and tissues of man and various animals, and that these germs are capable of an existence external to the body for a number of months, especially in dried sputum, and in places where least exposed to the free action of the atmosphere and sunlight.
- "2. That the germs of tuberculosis are conveyed in various ways to persons and animals, the principal media of these being:
 - (a) Dust containing dried sputum.
- (b) Food, either contaminated with infected particles, or the flesh of tuberculous animals.
 - (c) Milk from phthisical mothers and tuberculous cows.
- "3. That unsanitary conditions are the prime factors tending to the development and dissemination of the disease, such as:
 - (a) House and soil dampness.
 - (b) Lack of sunlight and bad ventilation.

- (c) Bad plumbing and house-drainage.
- (d) Over-crowding in living rooms, in schools, in workshops, in public institutions, etc.
- "4. That the disease is undoubtedly disseminated through the neglect to destroy or disinfect the sputa of the phthisical, distributed as this infectious matter is.
- (a) On infected linen (dangerous to washer-women), clothing, carpets, etc.
- (b) On the floors and walls of houses, workshops, hospitals and hotels, especially of health resorts.
- "5. That to limit the spread of tuberculosis it is necessary that notification by physicians and householders of its existence be made compulsory, thereby enabling health authorities to examine into the sanitary surroundings of those affected, and to make provision for the adoption of the necessary precautions against infection to the healthy.
- "6. That municipal inspection of dressed meat and of dairy cattle be systematically carried out, and that the notification of the health authorities by owners of infected animals be made compulsory.
- "7. That municipal and State governments ought to aid in the work of limiting the disease by the establishment of institutions especially designed for the reception and treatment of the phthisical, and so situated that while minimizing the danger to the general community, they may likewise supply means for outdoor work and exercise, suited to the condition of different patients.

"PETER H. BRYCE, M.D., Ch'm.

"LUCIEN F. SALOMON, M.D.

"PROF. V. C. VAUGHAN."

They are aiding in the progress of prophylactic practice when we as physicians disseminate such information among their patients and insist on its rigid rules when they are attending consumptives. It will be a long time before we can realize the ideal practice set forth by the resolutions of the "Conference," but we can patiently do our share of it and await the education of the people.

Relation of Tuberculosis to Animals.

It is too large a subject to undertake in this report to point out

the possibility of the transmission of the disease through the milk and flesh of bovine animals.

We have a remarkable demonstration of the existence of tuberculosis in a fine herd of cattle, reported in the *Medical News* of Philadelphia, and reproduced in the North Carolina Medical Journal for April, 1892.

It must not be presumed that because this fluid was made in Philadelphia by specialists that it is rare, the serious question is how far-spread the disease may be in the cattle in our State. Since we pay no attention to the rudiments of flesh-food inspection, there is little promise that the detection of the disease will be sought after to the apparent detriment of the owners of valuable property. Fortunately, as to the dangers from beef as food, the purification by fire in cooking is our present safeguard. In fact, it is not at all proven that cases can be traced from the consumption of beef. Notwithstanding this it is no longer a subject we may neglect with impunity.

The History of Small-Pox in North Carolina—The Introduction of Inoculation and Vaccination; the Condition of the Inmates of our Jails and Poor Houses as to Protection by Vaccination.

The Small-Pox was brought to America by the earlier settlers. It ravaged the Indian tribes fearfully. Lawson* speaks of the Sewee Indians thus: "The small-pox has destroyed many thonsands of these natives who, no sooner than they were attacked with the violent fevers and burning which attends that distemper, fling themselves overhead in the water, in the very extremity of the disease, which, shutting up the pores, hinders a kindly evacuation of the pestilential matter and drives it back, by which means death most commonly ensues."

Dr. John Brickell, in his National History of North Carolina,† says that the small-pox never visited North Carolina but once, and that in the late Indian war, which destroyed most of those savages that were seized with it.

The Small-Pox spread in Salem, having been brought there by a company of cavalry of the Pulaski Legion, which in 1779 camped

^{*}Dublin, 1737, p. 253.

[†]History of North Carolina, Raleigh edition, 1860, p. 25.

there several days. Forty persons suffered from the disease, of whom only two died. Two years after that (in 1781) inoculation was introduced in Salem.* So meagre are statistics relating to the diseases and causes of death of all that period from the time of the first settlements to the time of the organization of the North Carolina Boad of Health that nothing is accurately known except the items one can gather from old letters and newspapers, or diaries such as that of Thacher's itinerary American Army in the war of 1777. One exception can be made to the diary so carefully preserved by the Moravian Church in their Archives. Although the note given to current events is short, the historian who is favored with an examination of these valuable documents will find a daily account of the births, marriages, deaths and baptisms of the members of that honored fraternity which has shed its benignant influences on the rest of the State for more than a century. It was also in Salem that the first vaccinations are recorded. In 1802 eighty persons were vaccinated there. It is likely that in Wilmington, Fayetteville, New Bern, Edenton and some of the older towns lying along the great water courses in the line of travel also had adopted vaccination, but no record has come to the eye of the writer.

We know nothing of the spread of the practice through the influence of these Christian pioneers, but if they were as 'diligent in the dissemination of the new prophylactic as they were in carrying the Gospel of Peace to the remotest wilds of civilization, we may be sure that they shared this beneficence with their neighbors.

Down to the period of the civil war cases of small pox occurred at long intervals and principally at the seaports. Indeed, so far apart did cases occur that at Wilmington, for instance, when a case was discovered it became necessary to rid the pest-house at Mt. Tirza of the fisherman who had taken possession, to admit the solitary case of small-pox in the person of a sailor. But with the war came an outbreak of small-pox, which increased as the four years rolled on, reaching its culmination in 1865-'66 among the great masses of freedmen who flocked to the towns when peace was established.

We all know the story of the scarcity and impurity of vaccine

^{*}Reichel's Moravians in North Carolina; 12mo.; Salem, 1857.

virus during the war period, or if any have forgotten let them read the account of it as written by Dr. Joseph Jones (Spurious Vaccination in the Confederate Armies), and by Dr. James Bolton, of Richmond. Vaccinations which were inoculations of pus, and probably of syphilitic virus, were done from arm to arm by soldiers, and this communicated to people in civil life, causing the direst calamities before the practice could be stopped. After the war was over, and it became necessary to resort to wholesale vaccination, the virus furnished by United States Army officials was of the most unreliable character, defeating the most intelligent attempts at protecting the helpless throngs that crowded into the sea-coast towns.

The history of the small-pox from 1861 to 1866 in Wilmington alone would furnish a complete demonstration of the dangers of neglected vaccination, and the harm of spurious vaccination by crusts taken indiscriminately from doubtful vaccinifers. In the small-pox hospital here there were about 800 patients from August, 1865, to May, 1866—most of them negroes, and most of them unprotected by ante-bellum vaccinations.

There are many physicians in North Carolina who have been practising twenty-five years who have never seen a case of small-pox, but it will probably not be as many years before they will see cases, if the practice of vaccination just now is to comply with the requirements of insurance companies, most of which will not accept an applicant who is not protected by vaccination, or refuse by written declaration to pay a claim, if the death is from small-pox.

Statistics of Jails and Poor Houses.

I have taken the reports of the Superintendents from the *Bulletin* for one month, chosen without particular selection from 1891, and the following are the results. The statistics are from 36 counties:

In three counties all were vaccinated.

" 1 " 15 out of 20 "
" 1 " 6 " 12 "

" 25 " there were no vaccinations.

In the 36 counties the total of immates of the poor houses and jails was 864, of whom 104 were vaccinated. That is to say that less than one in eight were protected by the only known prophylactic. It may not be, and probably is not a fair deduction, to

conclude that the entire population is unprotected in the same ratio, but it demonstrates that lack of protection exists among the classes of our population, the criminal and dependent, where we know are usually located foci of infection. There are two chief influences that have brought about this state of things:

1st. There is a considerable anti-vaccination sentiment among the people at large. A prejudice which has grown out of the echoes of the English anti-vaccination societies which are found in the newspapers, and from the lack of conviction on the part of physicians about the necessity of vaccinating infants.

2d. The feeling of security which has overtaken doctors and their patients by the long disappearance of the scourge, and the knowledge of the fact that they can procure in a short time fresh and reliable vaccine.

The State Board of Health sounds the warning now, and this seems to be the appropriate time when so many representative physicians are present to call to their attention the fact that their patrons, who ever look to them for protection, are growing up ignorant of the risks they are running without vaccination.

Thomas F. Wood, M.D., Secretary of the State Board of Health.

DISCUSSION.

Dr. Haigh was much interested in the report of the Secretary. He wished to call attention to the fact that consumption had become implanted in those places that are much frequented as a resort for consumptives, whereas in former years they had been free from the disease. About fourteen years ago he was in Asheville and a friend was boasting of the fact that there had never been a case of consumption in a native and recommending the place as a resort. He made the remark that they would not always enjoy that immunity. He remembered when Italy was a famous resort for consumptives, but that latterly it was becoming deserted by these patients because consumption had gotten such a deep root there. Not long since his friend in Asheville wrote him that he had seen his first case of tuberculosis in one of their inhabitants.

Dr. Westray Battle said in reply that he took up his residence in Asheville about seven years ago, and that at that time there was a prevailing idea that the section embracing an area of about one hundred miles by fifty enjoyed a complete immunity from consumption. Whether that were so he was not prepared to say because no statistics were kept. It was said that a consumptive patient carried to that country would not transmit the disease. He has seen cases that were contracted there; but he thinks his confrérès would bear him out in the assertion that the section does enjoy quite a freedom from the disease among the natives.

In the matter of the failure on the part of physicians to vaccinate, Dr. Haigh asked how were we to overcome the difficulty? A physician does not like to order a lot of vaccine virus to keep on hand in case a person desires vaccination, for the virus deteriorates by keeping, and when the case presents itself you would probably not have any virus that is good; nor would he feel exactly at his ease to advertise that he had just received a fresh lot of vaccine and was prepared to vaccinate all who desired the protection. Then, as we are to receive a fee for the service, he cannot make up his mind to go around telling his patients that they ought to be vaccinated; it looks too much like he were using it as a means of increasing his income. He saw only one way out of the difficulty, and that is to take the matter out of the hands of the general practitioner and make it the duty of the superintendents of health, and make it compulsory.

Dr. Potter, Superintendent of Health for New Hanover county, has been in the habit of getting a large quantity of vaccine virus at intervals through the Secretary of the State Board of Health. He takes his stock of virus and goes to the schools and explains the importance of the measure, and then vaccinates all who are willing. In one school of 200 he vaccinated 150, and all the others had been vaccinated previously. He had very little trouble when once they understood the necessity of it He makes it a point each spring to go around and vaccinate all he can.

Dr. Wood explained to the members how they could at any time procure a fresh and reliable amount of vaccine virus to meet any emergency that might arise.

Dr. H. W. Lewis gave his experience in the matter of attempting to vaccinate the children of the schools. He put up a notice that he would visit the school at a certain date to vaccinate all who desired it, and when he reached the school he found that the pupils

had all taken to the woods. He went to another school and found they had no scholars. He thought the Superintendent of Health was placed in a very embarrassing position. He holds the office of Superintendent in his county. He complained that the salary of the Superintendent was left to the Board of Commissioners, and that the service was worth three or four times what they would allow. He thought the salary ought to be fixed by the Legislature in proportion to the number of inmates in the poor house and the population of the county. The remuneration is so small that it is seldom a competent man can be found willing to accept the office. Let there be evidence of successful vaccination before a pupil may be admitted to the public schools. He thought as Dr. Wood said, that we are raising a rich harvest ready for the reaper. He suggested that the State Board of Health prepare a pamphlet for distribution among the people teaching them the vital importance of vaccination.

Dr. D. C. Parris said that in his county (Orange) where he is the Superintendent of Health, vaccination is going by default. There is practically no vaccination except a case now and then in an applicant for life insurance. He thinks nothing but a compulsory law would bring about the desired end.

Dr. Cheatham had listened with much interest to the subject. Our population is of such a character and our railroads of such extent, affording quick and ready communication with other parts of the country, that we are liable at any time to the introduction of small-pox. Numbers of people are constantly making visits to the northern cities where cases of the disease are frequently occurring and where they are liable to come into contact with it. These people are liable to bring it into our midst. He thinks the Society should take some steps toward having a law enacted on the subject.

The President thought nothing but a disastrous epidemic would awaken the people from their iethargy.

Dr. Parris offered a resolution which was amended by Dr. Roberts to read as follows:

Resolved, That the Board of Health be instructed to memorialize the Legislature of the State of North Carolina in regard to a law of compulsory vaccination.

Dr. Graham thought that the Legislature was apt to look upon anything presented by the medical profession with suspicion, and

thought it would be best to approach them through the Superin tendent of Public Instruction.

Dr. Hodges thought a mere appeal would amount to nothing, but that a committee should be appointed to be present when the bill is presented to work it up by direct conversation with the individual members.

Dr. Roberts explained that he had put the resolution in such form that just what to do and how to do it should be left to the discretion of the Board of Health.

Dr. Lewis amended the resolution as follows: That a committee be selected by the Board of Health to go to Raleigh and get through the best law possible on vaccination.

The amendment was adopted.

Election of a New Member.

The election of a new member on the Board of Health to fill the unexpered term of Dr. Baker was declared in order.

Dr. H. W. Lewis, of Jackson, and Dr. W. H. Harrell, of Williamston, were put in nomination. The result of the ballot was in favor of Dr. Harrell, and on motion of Dr. Lewis, the election was made unanimous.

The Conjoint Session was declared adjourned, and the Society was called to order.

Report of Committee on Credentials.

A report of the Committee on Credentials was presented and accepted, and the Society then adjourned.

SECOND DAY-Afternoon Session.

The Society was called to order at 3 o'clock.

A Telegram of Greeting.

The Secretary read a telegram of greeting from the Medical Society of the State of Pennsylvania, which was duly appreciated, and, on motion, the Secretary was instructed to wire in return the fraternal greeting of this Society.

The Secretary said he had received the report of the Chairman of the Section on Practice of Medicine.

On motion, the paper was referred to the Committee on Publication. [See subsequent number of JOURNAL.]

Report of the Committee on Finance.

Dr. Tayloe presented the following report of the Committe on Finance:

Your Committee have examined the Treasurer's accounts and find them correct, as follows:

The Committee recommend an assessment of \$2.00 per capita for the ensuing year, and that the salary of the Secretary and Treasurer be the same for next year.

D. T. TAYLOE,
M. P. PERRY,
S. D. BOOTH,
Committee on Finance,

On motion the report was adopted.

Report of Committee on Credentials.

The Committee on Credentials made a report, which was adopted.

Excursion to the Hammocks and Reception at the Y. M. C. A. Hall.

Dr. Shepard, for the Committee of Arrangements, announced on the programme for Thursday an excursion to the Hammocks in the afternoon and a general reception at the Y. M. C. A. hall in the evening.

Election of Members on the Board of Medical Examiners.

The Chair announced that the Society was ready to hear nominations to fill two vacancies on the Board of Medical Examiners caused by the expiration of the terms of office of Drs. Purefoy and Payne.

The following names were placed in nomination: Drs. J. M. Baker, H. B. Weaver, W. H. H. Cobb, W. C. Galloway and S. T. Nicholson.

Dr. Cobb expressed his thanks for the nomination, but requested to have his name withdrawn.

It was moved and adopted that each member vote for both vacancies at one time.

Drs. Riddick, Summerell and Tayloe were appointed tellers.

The following was the result of the ballot:

Total number of votes cast 129; necessary to a choice 65. Dr. Baker received 79 votes; Dr. Weaver 75; Dr. Galloway 56, and Dr. Nicholson 43.

Dr. Julian M. Baker, of Tarboro, and Dr. H. B. Weaver, of Asheville, were declared duly elected as members of the Board of Medical Examiners of the State of North Carolina, to serve for six years.

Election of Officers of the Society.

Nominations for President being declared in order, Dr. J. W. McNeill was put in nomination by Dr. Burbank

There being no further nominations, on motion, the Secretary was instructed to cast the vote of the Society for Dr. J. W. McNeill, of Fayetteville.

Dr. McNeill was declared duly elected President for the ensuing year.

The following names were put in nomination for Vice-Presidents: Drs. W. C. Galloway, H. H. Harris, J. M. Hadley, Thomas Hill, S. T. Nicholson, D. McBryde and R. W. Tate.

On motion, it was decided that the four receiving the highest number of votes be declared elected, and that they take rank according to the number of votes received; also that each member be allowed to vote for four candidates on one ballot.

As the result of the election the following were declared elected: Dr. W. C. Galloway, of Winston, 1st Vice-President; Dr. H. H. Harris, of Wake Forest, 2d Vice-President; Dr. J. M. Hadley, LaGrange, 3d Vice-President; Thomas Hill, Goldsboro, 4th Vice-President.

The following names were put in nomination for Secretary: Drs. R. D. Jewett, J. W. Long, J. A. Hodges and T. M. Jordan.

Drs. Hodges and Jordan both requested that their names be withdrawn.

Dr. Long received 43 votes and Dr. Jewett 68.

Dr. R. D. Jewett, of Wilmington, was declared elected Secretary, and, on motion of Dr. Long, the election was made unanimous.

Dr. M. P. Perry, of Macon, being the only nominee for Treasurer on motion, the Secretary was instructed to cast the vote of the Society for him, and he was declared duly elected.

Report of Committee on Nominations.

The Committee on Nominations made the following report, which was received:

Orator.-Dr. J. A. Hodges.

Essavist.—Dr. J. M. Faison.

Board of Censors.-W. C. McDuffie, T. E. Anderson, W. H. H. Cobb, Sr.

Obituary Committee.-T. F. Wo.d, J. G. Riddick and H. B. Weaver.

Committee on Publication.—Geo. G. Thomas, T. S. Burbank, Thomas F. Wood, R. D. Jewett.

Delegates to American Medical Association .- C. J. O'Hagan, E. H. Horneday, L. J. Picöt, G. W. Long, B. L. Long, E. C. Laird, W. T. Cheatham, J. M. Baker, T. D. Haigh, Hubert Haywood, J. Howell Way, D. W. Bulluck, S. Westray Battle, S. S. Satchwell, R. L. Pavne, Jr., J. Y. Fitzgerald.

Delegates to the Southern Surgical and Gynwcological Association .- D. T. Tayloe, W. J. Love, A. W. Knox.

Delegates to the Virginia State Medical Society. - W. H. Harrell, R. D. Jewett, T. P. Wynn.

Delegates to the South Carolina Medical Society.-D. M. Prince, J. F. Harrell, W. A. Graham.

Delegates to the American Public Health Association.—H. T. Bahnson, John Manning, J. H. Marsh.

Delegates to the British Medical Association and International Congress.—D. G. Colwell, A. D. McDonald, J. W. Jones.

J. W. McNeill, (Signed) H. H. HARRIS, T. S. BURBANK, W. H. HARRELL, E. C. LAIRD.

Dr. S. S. Satchwell presented a paper entitled Biographical Sketch of Dr. James I. Phillips, Deceased, of Edgecombe County.

On motion, the paper was read by title and referred to the Committee on Publication. [See subsequent number of Journal.]

Time and Place of Next Meeting.

The question was raised as to the time of the meetings of the Society, some of the members thinking it should be held at an earlier date. On motion, it was decided that the matter should be left with the Committee of Arrangements at the place selected for the meeting.

In the selection of a place for the next meeting of the Society Winston-Salem and Raleigh were put in nomination with the choice of the former.

SECOND DAY-Evening Session.

The Society was called to order by the President, who thanked the ladies for their presence in the following happy terms:

"They cheer us on to a higher place of usefulness in our profession. I believe the medical profession has been ever warm in its championship and admiration for true womanhood. When we see women walking uprightly, fulfilling that mission that her Creator manifested and desired she should, she inspires in us an emotion of profound admiration for the beauty and loveliness of her character. Ever since the day when God took the rib from Adam's side and made woman she has been a ministering angel to wipe away the tear of grief and sorrow from man's brow and scatter flowers in the pathway of his life. Indeed, under such circumstances she is the delineation and embodiment of all that is lovely and beautiful. It is painted upon her cheeks in heavenly smiles, flows in her ringlets, charms in her voice, throbs in her breast, moves in her steps. and mingles and shines in the graces of her love. In sorrow, sadness, pleasure, woe and pain she is untiring, unceasing in her devotion to those duties which alone make life worth living. She is oftentimes the physician's main reliance, and by her intuitive kindness and quick perception is the means of saving many poor sufferers from untimely passing to that mysterious beyond, that undiscovered country, from whose bourne no traveller returns."

The essayist, Dr. Oscar McMullau, was then introduced by Dr. Thos. S. Burbank, and read the Annual Essay, entitled The Ideal in Medicine.

The essay received the marked attention and hearty applause of the very large audience.

Dr. J. W. Long was introduced by the President, and delivered the Annual Oration, entitled Character the True Test of the Physician.

Dr. Long's address extended over an hour and a quarter, and he was frequently interrupted by the applause of his audience.

On motion, the thanks of the Society were extended to both the Essayist and the Orator for their able and interesting productions, and the papers were referred to the Committee on Publication. [See subsequent number of JOURNAL.]

Dr. W. H. H. Cobb, a member of the Board of Censors, being compelled to return home, Dr. Herring was appointed to act in his place.

On motion, the Society adjourned.

THIRD DAY-Morning Session.

The Society was called to order at 10 o'clock by the President.

Report of Committee on Credentials.

The Committee on Credentials made a partial report, which was adopted.

Dr. E. C. Laird read a paper on The Therapeutic Value of Mineral Waters. [Referred to the Committee on Publication.]

Dr. R. H. Lewis read a paper entitled A Few Plain Words About Glaucoma.

On motion, the paper was referred to the Committee on Publication. [See subsequent number of JOURNAL.]

Dr. Michael, of Baltimore, read a paper entitled Obstetrical Teaching.

On motion, the paper was referred to the Committee on Publication.

Report of the Committee on the Duffy Prize.

"We, the Committee appointed at the last meeting of the Society at Asheville, to decide as to the merits of essays for the 'Duffy Prize,' beg leave to report that two essays were offered, neither of which are on the subject for which the prize was offered.

"Dr. Duffy was wired, and he says in reply: 'Prize was offered for Treatment of Hæmorrhagic Malarial Fever. Doubtful about other questions. Will write.

"H. H. HARRIS, "W. J. Jones, "JOHN M FAISON,

" Committee."

(Since the meeting adjourned the following communication has been received by the Secretary):

"NEW BERNE, N. C., May 18, 1892.

" Dr. Julian M. Baker, Secretary of the N. C. Medical Society:

"DEAR SIR :- Your telegram, which was directed to my brother Charles, was received by me after some delay. I have answered by telegram as well as I could in brief, and now supplement by saying that it is my impression that several years ago (I think during the Presidency of Dr. Bahnson) it was suggested that the prize be offered for some subject not so localized as treatment of hæmorrhagic malarial fever would necessarily be. I think I either consented to the suggestion or left it discretionary with Dr. Bahnson or the Committee that year. I have noticed, however, that since that time the transactions or minutes of the Society have shown that the prize was, as originally stated, for treatment of hæmorrhagic malarial fever. That being the general impression, it would not invite competition in other fields, and essays would naturally be withheld that might otherwise be offered. I did not know nor think any other subject than hæmorrhagic malarial fever would be considered in that connection at this time, nor any time without specification. It was my intention to stimulate research in that field. As the money has been paid to the Society, they can do as they please with it, but it would be contrary to my feeling to award it to any other subject unless it was previously published and generally understood that writers were not restricted as to subject.

"Yours, very truly,

Dr. A. B. Pierce read a paper on the Treatment of Pneumonia. Dr. Pierce, in conclusion, called attention to the fact that he laid especial stress upon the specific action of mercury. He thinks all the symptoms will yield if we can get the specific effects in the first six or seven days.

Dr. Holmes does not believe in the universal use of calomel, but thinks it is often a most useful remedy, especially in pneumonia.

On motion, Dr. Pierce's paper was referred to the Committee on Publication. [See subsequent number of JOURNAL.]

Dr. Thos. S. Burbank made an oral report of operation on what was supposed to be an ovarian tumor. After the abdomen was opened the tumor was found firmly bound down to all the adjacent viscera. The womb could not be found. The operation was for exploratory purposes, with the understanding that if thought best the tumor should be removed. It was decided to remove it, and in breaking up the adhesions his hand ran into a cancerous mass that involved the rectum and the adjacent parts. The rectum, which had been ulcerated through in two places, was resected, about five inches being taken away. The gut was then attached to the angle of the median incision to make an artificial anus. The patient was put to bed in complete shock, and died in thirty-six hours. His principal object in bringing the case to the attention of the Society was to show some of the scrapes we get into when we invade the abdominal cavity.

Report of the Committee on the Pittman Prize.

Dr. Burbank, from the Committee on the Pittman Prize, reported that there had been only one paper presented, and this not bearing evidence of sufficient original thought and investigation, or general merit, the Committee suggested that no reward be made.

On motion, the report was adopted.

Installation of Officers.

The President appointed Drs. Bahnson and Pierce to escort the President-elect to the stage.

In tendering the gavel to his successor, Dr. Cheatham returned his heart-felt thanks to the Society for the courtesies and assistance they had extended him, and introduced Dr. J. W. McNeill. In assuming the Chair President McNeill said he felt assured that the nominee of the Democratic Convention at Raleigh yesterday, after the long contest, does not feel the pride in his heart this morning that he does after being nominated by this dignified and scientific body of the Medical Society of the State of North Carolina. He promised that, with the assistance of the members, when the Society meets again next year we will be one step further in the advancement in the science and practice of medicine.

Appointment of Chairmen of Sections, etc.

The Chair announced the following appointments for the ensuing year:

Chairman of Section on Practice.-Dr. E. M. Summerell.

Chairman of Section on Surgery .- Dr. J. P. Munroe.

Chairman of Section on Obstetrics.-Dr. J. H. Marsh.

Chairman of Section on Gynæcology.-Dr. R. H. Whitehead.

Chairman of Section on Materia Medica.-Dr. Thos. Stamps.

Chairman of Section on Therapeutics.-Dr. C. E. Hilliard.

Chairman of Section on Pathology and Microscopy.—W. T. Pate.

Chairman of Section on State Medicine and Medical Jurisprudence.—S. J. Montague.

Leader of Debate.—Dr. D. T. Tayloe.

Committee on Pittman Prize.—Drs. D. W. Bulluck, H. T. Bahnson, T. D. Haigh.

Committee on Duffy Prize.—Drs. N. B. Herring, D. McBryde, Duncan Smith.

Vote of Thanks.

Dr. Hodges offered a resolution that the thanks of the Society be extended the citizens of Wilmington, and especially the medical profession, for their kindness in entertaining the Medical Society. The resolution was adopted.

Dr. Bahnson and the Report of the Board of Censors,

Dr. Bahnson, acting temporarily on the Board of Censors, asked the action of the Society on a question relating to the report of the Board on yesterday. One of the gentlemen involved by that report had presented himself and asked for a hearing. He being the only member of the Board present at the time, he asked the wish of the Society as to whether other members be appointed to act with him, or whether the matter come before the Society.

The motion was made that the matter be brought before the whole Society.

The Chair thought it would be best to refer it to the Board, that they may have time to investigate the charges fully.

After some discussion, the motion to refer to the Society was lost.

A motion to reconsider was carried

Dr. Hodges thought the case an unusual one, and suggested the appointment of two members to act temporarily with Dr. Bahnson. This is the duty of the Board and just what it was instituted for, and he thought it should be left to it.

Dr. Robinson rose to explain why he was unable to be present sooner, and went on to state the facts in the case which had been acted upon by the Board.

Dr. Hodges. in view of the fact that the gentleman had been suspended on yesterday, objected to his making any statements.

After some further discussion on the matter, Dr. Long asked the ruling of the Chair as to whether we have the right to take the matter out of the hands of the Board of Censors, and the Chair ruled that we have not the right.

Dr. Baker made a motion that two members be appointed to act with Dr. Bahnson, and that the matter be referred to them immediately.

The motion prevailed, and the Chair appointed Drs. A. B. Pierce and W. T. Cheatham.

Dr. J. D. Roberts made a report of a Case of Abnormally Low Temperature.

On motion, the report was referred to the Committee on Publication. [See subsequent number of JOURNAL.]

On motion, the Reporter was voted the usual fee of \$25.

Supplementary Report of the Board of Censors.

Dr. Bahnson made the following supplementary report of the Board of Censors:

"The Board of Censors beg leave to report as follows:

"WHEREAS, Dr. M. E. Robinson has appealed for trial before

the Board of Censors on charges of advertising and vending a nostrum for the cure of drunkenness, and

"WHEREAS, The said Dr. M. E. Robinson acknowledges that he has so advertised, and further, that he has entered into a contract with the proprietor of the said nostrum, whereby a certain sum shall be paid to the said proprietor for each patient treated therewith, therefore be it

"Resolved, That this Board of Censors declares said charges of unprofessional conduct are fully sustained and recommend that the name of the said Dr. M E. Robinson be dropped from the roll of the Society.

Very respectfully submitted,

H. T. BAHNSON, Ch'm.

Dr. Pierce said that Dr. Robinson acknowledges he has done wrong, and that if he is willing to confess his error and renounce his effort in the matter, he is willing to restore him to his former position in the Society.

Dr. Bahnson said that was the consensus of opinion of the whole Society. It is a matter of principle and not of feeling against Dr. Robinson. The Society has nothing to do with the good that may result from Dr. Robinson's treatment, but he is vending a nostrum. It is manifestly in direct violation of every principle and the letter of the Code of Ethics.

A motion was made that the report be received.

With the permission of the Society Dr. Robinson said he would like to state that he knew the remedy, but did not know the constituents thereof. Dr. Bahnson had intimated that he was under contract. He told the Board of Censors that if he had done wrong he was willing to correct his action.

Dr. Cheatham said the Committee had only one duty to perform namely, to investigate the charges; they had done this and found them true.

A motion to receive the report of the Board was carried.

Dr. Pierce offered a resolution that if Dr. Robinson acknowledged his error and promised to correct it, that he be readmitted to his former standing in the Society.

Dr. Bahnson rose to a point of order. He said the report of the Board of Censors had been received by the Society expelling Dr. Robinson. The expression of Dr. Robinson before the meeting

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was radically opposite to that before the Board, as he understood it. He was willing to withdraw the advertisement, but that had already done its harm. He could not avoid treating patients that came to him in answer to his advertisement. He made no promise to the Board that he would not use this nostrum.

Dr. Robinson said that Dr. Bahnson had asked him that question and that he had replied "yes."

Dr. Bahnson explained his point of order by saying that the action of the Society could not be reversed in any such way; that if Dr. Robinson desired to come into the Society, the regular door was open to him as it was to anyone else, and that he could not come in by the back-door.

Dr. Pierce thought that, as Dr. Robinson had confessed his error and was willing to renounce it, he should be restored to his former position in the Society.

Dr. Bahnson called for the ruling of the Chair on his point of order.

The Chair ruled that it is out of order to take any further action in the matter at this time; that Dr. Robinson will have to come back into the Society by the usual way.

Report of the Committee on Credentials.

During the meeting the following names were presented by the Committee on Credentials: Drs. P. A. Nicholson, E. L. Cox, E. G. Goodman, W. H. Atkinson, W. J. Harrell, Russell Bellamy, W. F. Stokes, A. J. Patterson, P. R. Hatch, G. L. Clark, R. W. Mills, H. Johnson, W. V. McCanless, C. G. Carter, A. G. Jones, S. P. Wright, F. P. Gates, G. V. Cate, T. S. McMullan, K. A. Blue, W. R. Mayo, W. E. Fitch, C. B. Ingraham, J. B. Shamburger, W. D. McMillan, G. M. Hackler.

Members Present.

The following members were present at the meeting: Drs. J. C. Shepard, F. J. Cooper, Henry T. Bahnson, Joseph Graham, J. J. Mann, W. J. H. Bellamy, S. D. Booth, J. L. Ray, J. F. Harrell, Thomas M. Jordan, J. T. Nicholson, R. F. Lewis, M. H. Futrell, S. T. Nicholson, C. M. Poole, B. L. Long, J. E. Grumsley, C. G. Nichols, Willis Alston, A. McKinnon, J. H. Marsh, T. D. Haigh,

Adjournment.

rington, H. H. Whitaker, J. E. Asheraft, W. D. McMillan, J. G. Blount, L. J. Picöt, J. M. Faison, G. W. Long, R. L. Payne, Jr.,

On motion, the Society adjourned to meet in Winston.

W. K. Anders, R. H. Lewis, O. McMullan.

THE TRANSACTIONS OF THE WILMINGTON MEETING.—We have given up nearly all of our space to the meeting of the Medical Society, that our readers may have the entire work of the session before them. The Papers will appear in successive numbers of the Journal until all that are passed upon by the Publication Committee are printed.

BOARD OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA—SESSION HELD IN WILMINGTON MAY 16TH, 17TH, 18TH, 19TH, 20TH, 1892.

WILMINGTON, N. C., May 16, 1892.

The Board of Medical Examiners met at the rooms of the Orton House, at 9 o'clock, a. m., Monday, May 16th, 1892.

There were present Drs. W. H. Whitehead, President; George Gillett Thomas, Robt. Lee Payne, Jr., George W. Long, L. J. Picôt, Secretary.

Drs. Long and Thomas were appointed as the Committee on Finance. The bills and vouchers of the Secretary were : pproved.

On motion of Dr. Thomas it was ordered that Dr. Picôt be reimbursed his expenses as a witness to Alamance Court in the case of J. T. F. Cummings vs. Huffman and Gerringer, executors.

Drs. Young and Purefoy came in on the afternoon train and reported for duty.

The first examination was held by Dr. Thomas, on Chemistry, at the building of the Young Men's Christian Association. Two examinations were held daily, and on Wednesday three, one of them, on Materia Medica and Therapeutics, at night.

Dr W C. Kiser, of Reepsville, was granted an oral examination in his bed, on account of an attack of sciatica.

The examinations were written, as heretofore, and a standard of 80 per cent. required There were 69 applicants, and the following were granted license:

Dr. Robert H Stancell, Margarettesville.

- " S L. Martin, Leaksville.
- " W. B. Bullock, Franklinton.
- " L. A Crowell, Lincolnton.
- " H. J. Thomas, Winston.
- " J. E. Dellinger (col.), Lowesville.
- " A J. Crowell, Cobwin's Store.
- " E. A. Rainey, Germanton.
- " C. M. Jones, Tarborough.
- " R W. Smith, Hertford.
- " H. L. Baird, Asheville.
- " H. S. Williams, "
- " J. Thomas Wright, Salisbury.

Dr. N. B. Houser (col.), Charlotte.

- " William R. Ballou, New York City.
- " Robert L Caviness, Coleridge.
- " John W. Jones (col.), Warrenton.
- " Joshua Tayloe, Washington.
- " J. B. Griggs, Elizabeth City.
- " T. A. Boaz, Price.
- " James T. Rieves, Julian.
- " W. C. Ashworth, Ashboro.
- " C. J. Oliveros, Asheville.
- " E. J. Buchanan, Salisbury.
- " W C. Folger, Dobson.
- " A. H. Harriss, Wilmington.
- " Andrew J. Koontz, Roaring River.
- " Claude A Adams, Carry.
- " Henry M. Long, Statesville.
- " John C. Twitty, Rutherfordton.
- " Charles S. Summers, Winston.
- " T V. Roberson, Weaverville.
- " S E Pennington, Sturgill's.
- " Frank Roberts, Marshall.
- " S C. McGilvra, Asheville.
- " William Bowen, Knoxville, Tenn.
- " M. E Gattis, Raleigh.
- " J C Rodman, Washington.
- " J. W. Costen, Sunbury.
- " M. S. Stevens, Enochville.
- " John G. Blount, Washington.
- " John H. Brunett, Wadesboro.
- " S. L. Perkins, Solitude.
- " John Bynum, Winston.
- " H. R. Hoover, Elm City.

Total 45.

Dr. E. J. Buchanan, having made the highest grade on all the branches, is entitled to the Appleton Prize.

During the interval between the meetings of the Board in 1891 and 1892 temporary licenses were granted to the following named persons:

Dr. N. B Houser.

- " S. W. Jones.
- " A J. Koonth.
- " W. C. Folger.
- " M. E. Gattis.
- " H. L. Baird.
- " W. A. Dees.
- " E. L. Corbell.
- " William L. Lassiter.
- " J. B. Griggs.
- " L. G Frazier.
- " H. J. Thomas.
- " J. W. Jones.
- " John Brunett.
- " M. L Stevens.
- " LeRoy Long.
- " C. S. Summers.
- " J. T. Rieves.
- " R. A. Moore,
- " T. L. Douglass.
- " H. R. Hoover.
- " J. F. Powell.
- " C. J. Oliveros.
- " S. C. McGilvra.
 " McDonnell.

The fees were turned over to the Treasurer by the Examiners granting the above licenses.

These temporary licenses expired on Monday morning, May 16th, and the holders who failed to secure permanent licenses, or a renewal of temporary license, under the rules, are liable to indictment.

The terms of service of Drs. George W. Purefoy and Robert Lee Payne, Jr., having expired, Dr. H. B. Weaver, of Asheville, and Dr. Julien M. Baker, of Tarborough, were elected to fill the vacancies.

After a night's session, lasting until 3 a. m., Saturday, May 21st, the Board adjourned.

W. H. WHITEHEAD, M.D.,

L. J. Picôt, M.D.,

President.

Secretary.

READING NOTICES.

Happy and content is a home with "The Rochester;" a lamp with the light of the morning For catalogue, write Rochester Lamp Co. New York.

A New, Safe Method of Administering Toxic Medicaments.—A new departure in therapeutical posology marks a recent enterprise of Parke, Davis & Co., which is in the interests of progress, economy and exactness.

The increased knowledge resulting from research in the fields of botany, chemistry, physiology, pharmacy and materia medica has created a demand on the part of the medical profession for the essential or active principles of drugs in preference to the more cumbersome, less definite pharmaceutical preparations which custom and authority have so long sanctioned.

Not a few alkaloidal principles of drugs have been isolated, and are now frequently prescribed. The conservative element of the profession have, however, in view of the toxicity of certain isolated medicinal principles, and the acknowledged variety of strength and activity of products of this character of different manufacture, been loath to employ them when medicated.

The doses sometimes being fractions of a thousandth or a hundredth, it is not possible for the physician to always bear them in mind, and in prescribing he is often in doubt as to what constitutes the proper therapeutical dose, and what the dangerous toxic one.

Dr. E. Trouette, in a paper read before the Paris Academy of Medicine, and published in the Revue de Thérapeutique, entitled "Duodecimal Doses of Toxic Medicaments," proposes a method of obviating the difficulties hitherto preventing the general use of many valuable medicinal principles. The plan he proposes is a new method of posology based on the rational division into twelve parts of the maximum dose which may be given to an adult in twenty-four hours.

The advantages claimed for this method are, first, accidental poisoning need no longer be feared. Second, dangerous medicaments may from the outset be given in efficient dose without the least risk.

Parke, Davis & Co. have prepared diurnules and Diurnal Tablet Triturates of a large number of Toxic Medicaments, and will afford the profession full information concerning this new method of posology with reprint of Dr. Trouette's article.

SYR. HYPOPHOS. CO., FELLOWS

ontains the Essential Elements of the Animal Organization
—Potash and Lime

The Oxydising Agents—Iron and Manganese;

'he Tonics-Quinine and Strychnine;

bined in the form of a Syrup, with a Slightly Alkaline Reaction.

t Differs in its Effects from all Analogous Preparations;

and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

t has Gained a Wide Reputation, particularly in the treatment

of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases

and nutritive properties, by means of which the energy of the system is recruited.

ts action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation

with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; hence the preparation is of great value in the treatment of mental and nervous affections. From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

NOTICE-CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted cerain persons to offer imitations of it for sale. Mr. Fellows, who has exmined samples of several of these, finds that no two of them are idenical, and that all of them differ from the original in composition, in reedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, in the property of retaining the strychine in solution, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed nstead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. Fellows."

As a further precaution, it is advisible that the Syrup should be orlered in the original bottles; the distinguishing marks which the bottles

lered in the original bottles; the distinguishing marks which the bottles and the wrappers surrounding them) bear, can then be examined, and he genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to:

Mr. FELLOW, 48 Vesey Street, New York.

PEPTONOIDS BEEF (POWDER)

 $\begin{array}{c} \textbf{Sterilized} \left\{ \begin{array}{c} \textbf{BEEF,} \\ \textbf{MILK,} \\ \textbf{GLUTEN.} \end{array} \right\} \textbf{Partially Peptonized.} \end{array}$

THE MOST CONCENTRATED and NUTRITIOUS FOOD in the MARKET

Received the only GOLD MEDAL and Highest Award at the International Health Exhibition, London, after a critical examination of all the Beef and Concentrated Food Productions, by a Jury composed of the best Chemists in Europe.

There is no food preparation that compares with it in nutritive properties. It is partially prepared for assimilation, and, therefore, makes less demand upon the digestive powers of the gastric juice.

Being in the form of a dry powder and sterilized, it will keep in any climate. It contains 95 per cent of nutritious matter.

The use of BEEF PEPTONOIDS is indicated as follows:

Convalescence from all diseases, Pulmonary Affections, Pneumonia, Phthisis; Dyspepsia, Gastritis, and all Stomach Ailments; Fevers, Diarrhœa, Dysentery, and all Intestinal Diseases; Marasmus, Bright's Disease, Diabetes, and Excessive Use of Alcoholic Stimulants. BEEF PEPTONOIDS may be given per rectum in all cases where the stomach cannot digest food, and in Debility resulting from any cause.

PEPTONOIDS LIQUID.

This preparation represents BEEF PEPTONOIDS in the form of an elegant cor

dial, all constituents being entirely digested and ready for assimilation.

LIQUID PEPTONOIDS is a nourishing peptogenic liquid stimulant with the albuminoids in a soluble state with only sufficient spirits added to preserve it. It contains the largest amount of albuminoid principles and the least amount of alcohol that

is possible to use and make a stable compound.

LIQUID PEPTONOIDS will keep indefinitely; its flavor and palatability are such that many who have taken it liken it to a delicate cordial. It will readily be taken by patients who are unable to injest food in any other form (in these cases it has been found of the greatest service). In convalescence from fever and other diseases, in loss of appetite, weak digestion and gastritis its effects are positive, and it will never fail to give perfect satisfaction.

There is no preparation in the market that has been recommended so highly by

physicians who have carefully tested it.

DOSE.-For an adult, one tablespoonful three times to six times a day, childre nin proportion.

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(GRANULAR EFFERVESCING.)

A SEDATIVE NERVE AND BRAIN FOOD.

The most efficient and palatable preparation in Nervous and Sick Headache, Neuralgia, Insomnia, Neurasthenia, and General Nervous Irritability.

Each dessertpoonful contains: $\begin{cases} \text{Caffein.} & \text{Acidi Phosphorici, } \frac{1}{n-k} \text{ grains, ss.} \\ \text{Antipyrin.} & \text{Antipyrin.} \\ \text{Ext. Apii. Grav. Dulc. (Celery) } \frac{1}{n-k} \text{ grain j.} \\ \text{Sodium Bromide, grains v.} \end{cases}$

DOSE.—One or two heaping teaspoontuls in half tumbler of water. Put up in 4 oz. and 8 oz. Bottles

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(Successors to REED & CARNRICK for the above preparations,)

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